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19316B MLRS MISSILE NUMBER V6171 V6172 ROUND NUMBER
V633/AT2-84 V634/AT2-.. (U) ARMY ELECTRONICS RESEARCH
AND DEVELOPMENT COMMAND WSMR NM ATM. D C KELLER

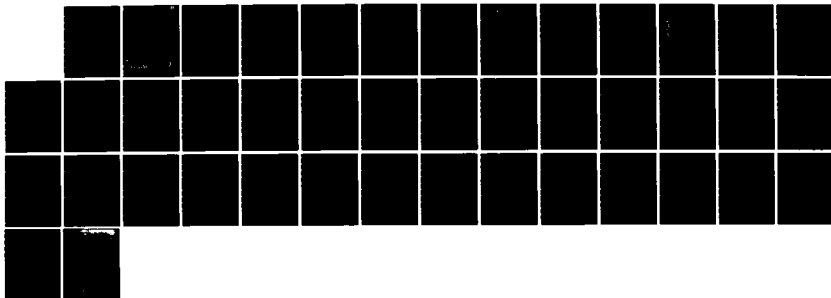
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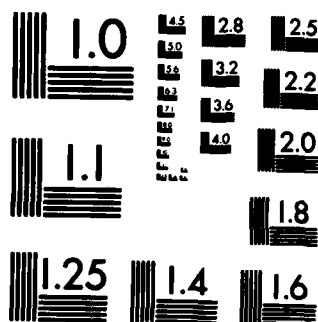
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ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

ECOM

UNITED STATES ARMY ELECTRONICS COMMAND

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REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER DR-1353	2. GOVT ACCESSION NO. AD-A146547	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) 19316B MLRS Missile Number V6171, V6172 Round Number V633/AT2-84, V634/AT2-85	5. TYPE OF REPORT & PERIOD COVERED	
7. AUTHOR(s) White Sands Meteorological Team	6. PERFORMING ORG. REPORT NUMBER	
9. PERFORMING ORGANIZATION NAME AND ADDRESS	8. CONTRACT OR GRANT NUMBER(s) DA Task 1F665702D127-02	
11. CONTROLLING OFFICE NAME AND ADDRESS US Army Electronics Research & Development Cmd Atmospheric Sciences Laboratory White Sands Missile Range, NM 88002	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS	
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) US Army Electronics Research and Development Cmd Adelphi, MD 20783	12. REPORT DATE Jul 84	
	13. NUMBER OF PAGES	
	15. SECURITY CLASS. (of this report) UNCLASSIFIED	
	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE	
16. DISTRIBUTION STATEMENT (of this Report)		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) Approved for public release; distribution unlimited.		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of the 19316B MLRS, Missile Number V6171, V6172, Round Number V633/AT2-84 and V634/AT2-85 are presented in tabular form.		

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INTRODUCTION

19316B MLRS, Missile Numbers V6171 and V6172, Round Numbers V633/AT2-84 and V634/AT2-85 were launched from Brillo, White Sands Missile Range (WSMR), New Mexico, at 1443:34 and 1513:08 MDT 30 Jul 80. The scheduled launch times were 1415 and 1445 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico.

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature ($^{\circ}\text{C}$), relative humidity, dew point ($^{\circ}\text{C}$), density (gm/m^3), wind direction and speed, and cloud cover were made at the NW-30 Met Site at T-0 Minutes.

(2) Anemometer data were provided from existing tower-mounted anemometers at Brillo. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from Pilot-balloon observations at:

SITE AND ALTITUDE

D3₁ 500 meters
Dead Horse 950 meters

(2) Air structure data (rawinsonde) were collected at the following Met Sites.

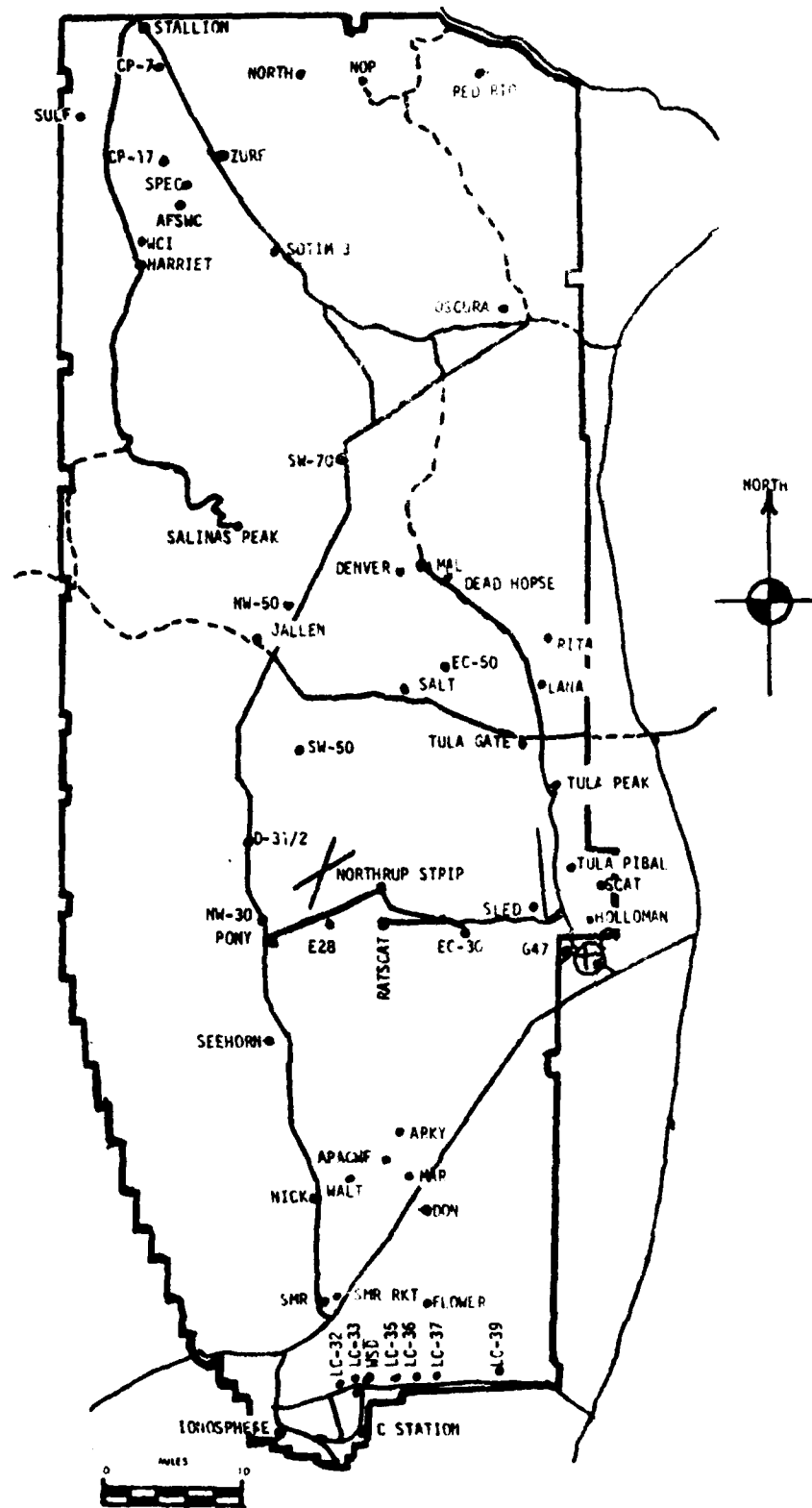
SITE AND TIME

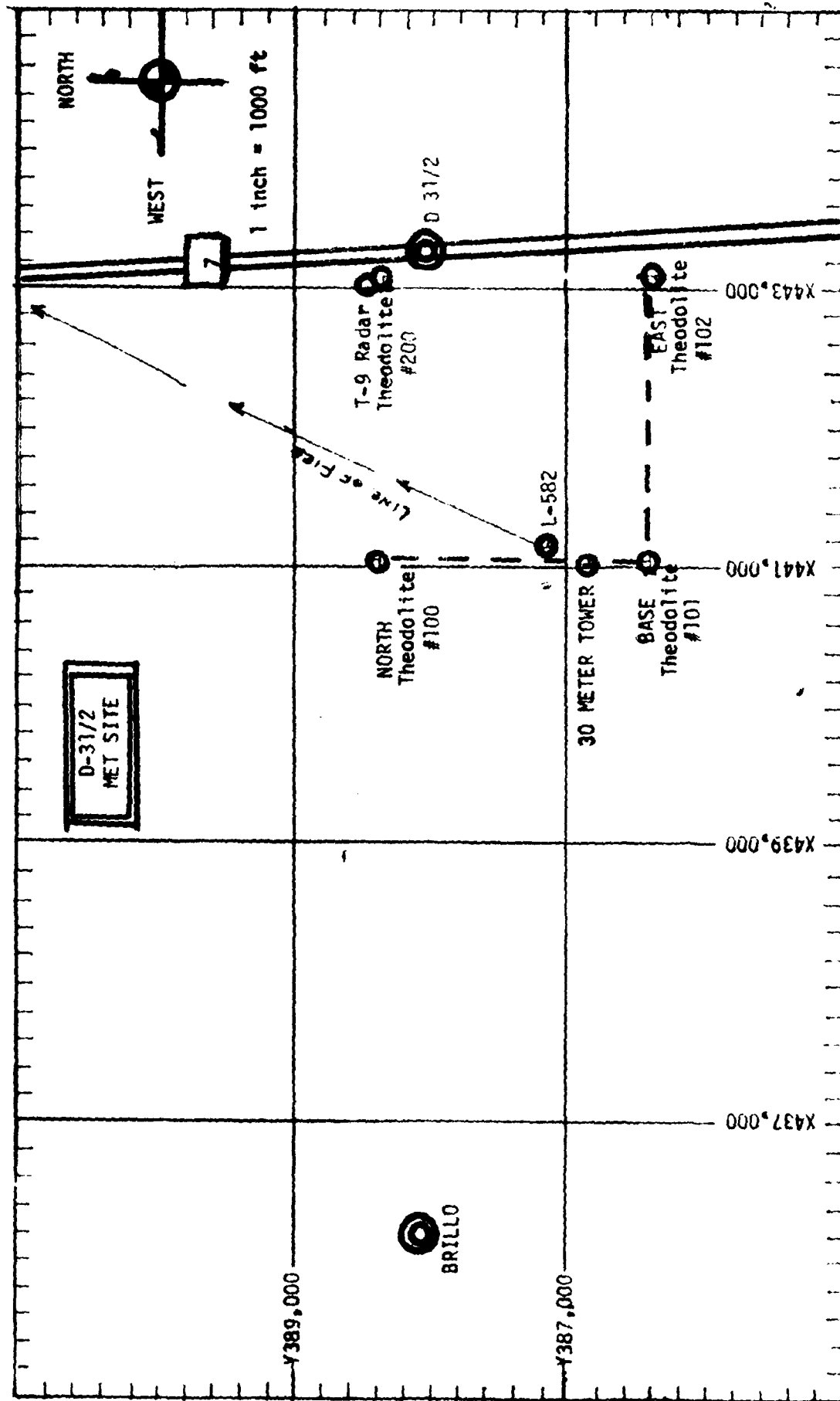
WSD 0845 MDT
NW-30 1130 MDT
JALLEN 1211 MDT
JALLEN 1444 MDT



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DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

WSMR METEOROLOGICAL SITES





PROJECT SURFACE OBSERVATION

TABLE 1

DATE 30 07 84

STATION NW-30

X= 449,712.25 Y=361,358.53 H= 4015.85

TIME M D J	PRESSURE mbs	TEMPERATURE OF °C	DEW POINT OF °C	RELATIVE HUMIDITY %	DENSITY gm/m ³	DIRECTION degs In	WIND SPEED kts	CHARACTER kts	VISIBIL- ITY
1415	880.2	32.8	7.2	20		090	10		40
1513	880.0	33.6	9.4	23		080	04		40

OBSTRUCTIONS TO VISIBILITY	CLOUDS							REMARKS		
	1st LAYER			2nd LAYER			3rd LAYER			
	AMT	TYPE	HGT	AMT	TYPE	HGT	AMT		TYPE	HGT
	3	CU	6000	0	AC	12000	1	CI	24000	T C U E
	3	CU	6000	0	AC	12000	1	CI	24000	

PSYCHROMETRIC COMPUTATION

TIME: MDT	1415	1513
DRY BULB TEMP.	32.8	33.6
WET BULB TEMP.	17.2	18.0
WET BULB DEPR.	15.6	15.6
DEW POINT	7.2	9.4
RELATIVE HUMID.	20	23

TABLE 2

ANEMOMETER DATA - 30 Ft Level of 30 Meter Tower

X= 41,016.71 Y= 386,849.19 H= 4004.80 (BASE)

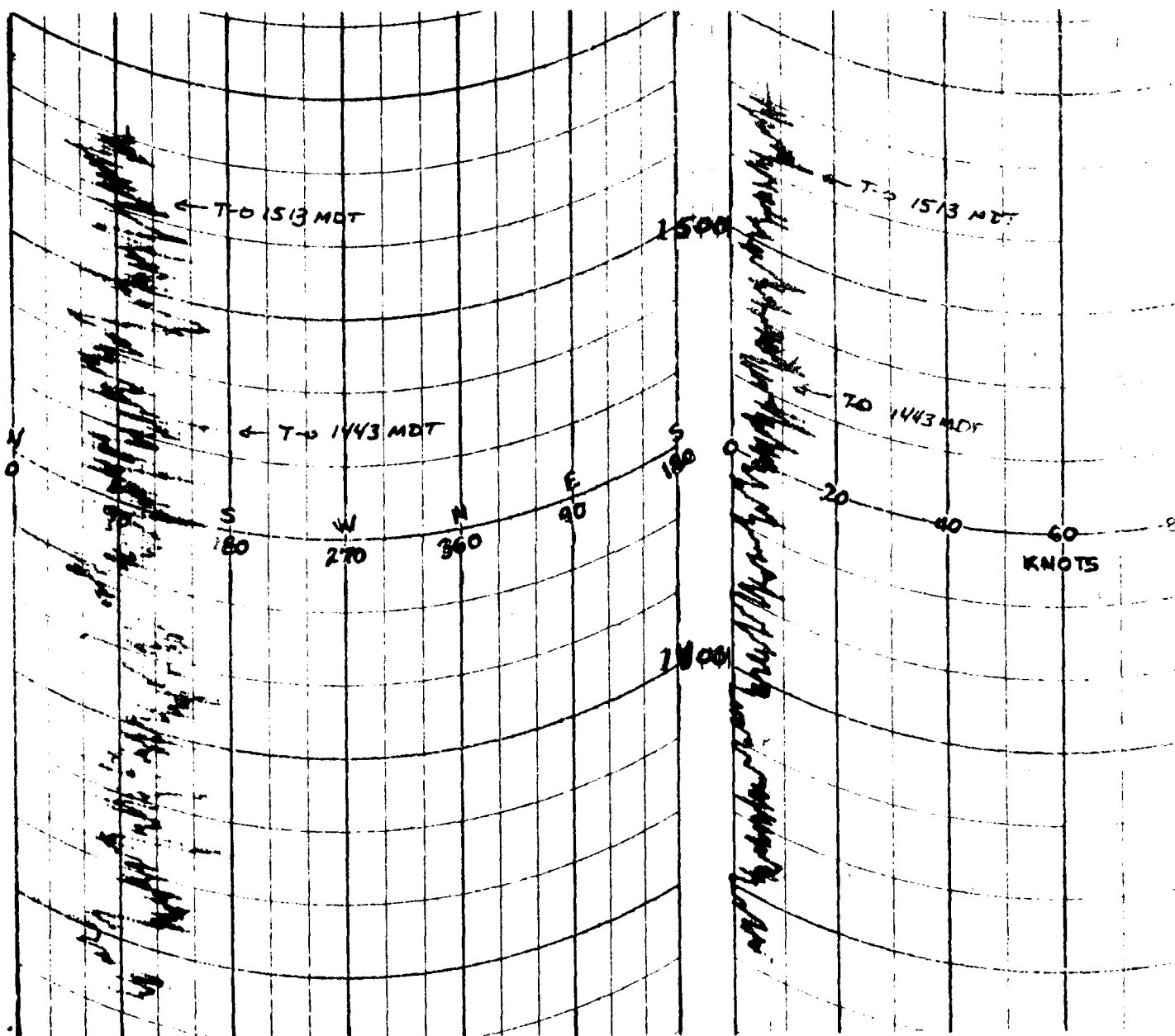


TABLE 3

ANEMOMETER DATA - 60 Ft Level of 30 Meter Tower

X= 441,018.71 Y= 386,649.19 H= 4004.60(BASE)

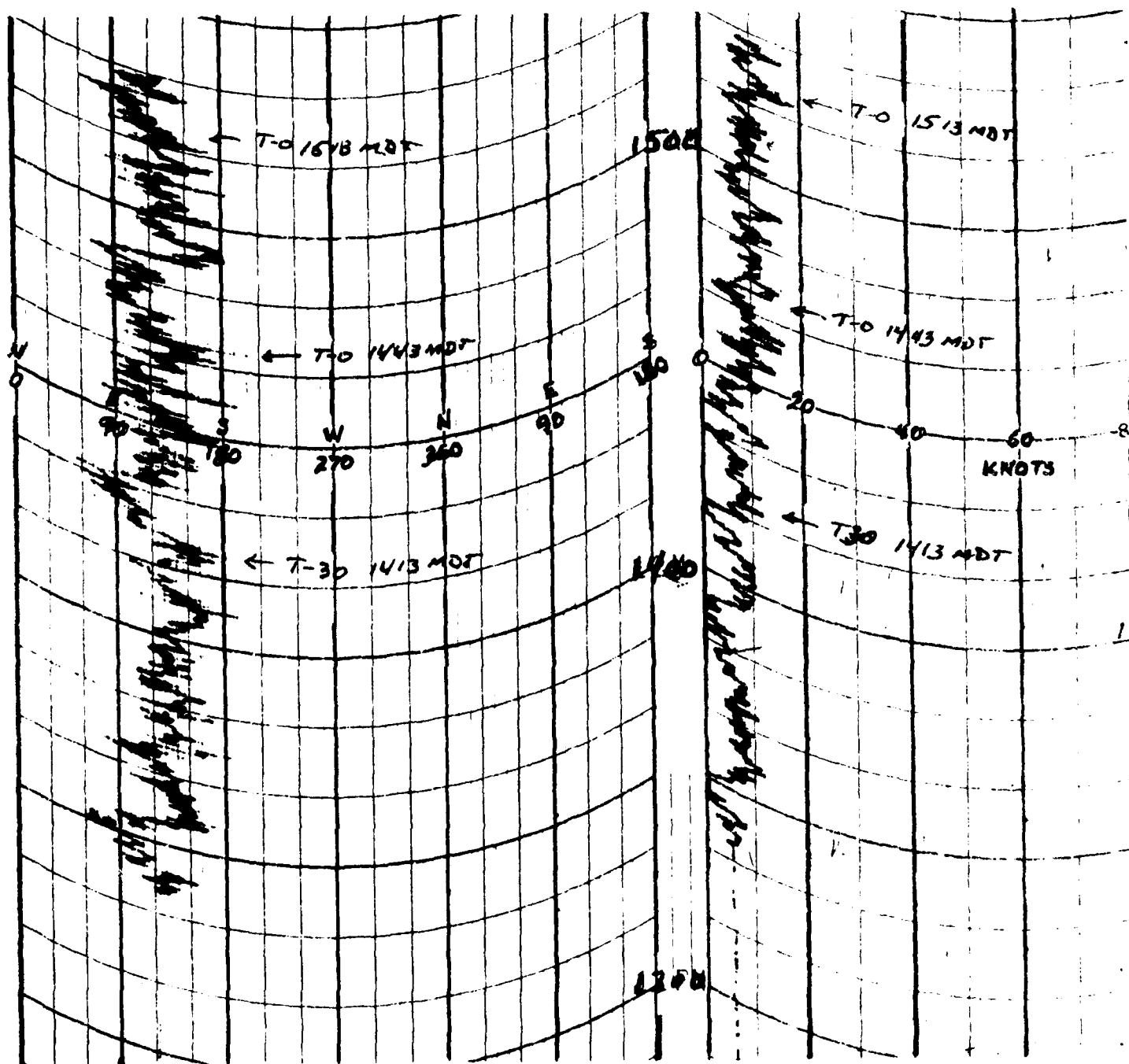


TABLE 4

ANEMOMETER DATA - 90 Ft Level of 30 Meter Tower

X= 441,018.71 Y= 386,849.19 H= 4004.80 (BASE)

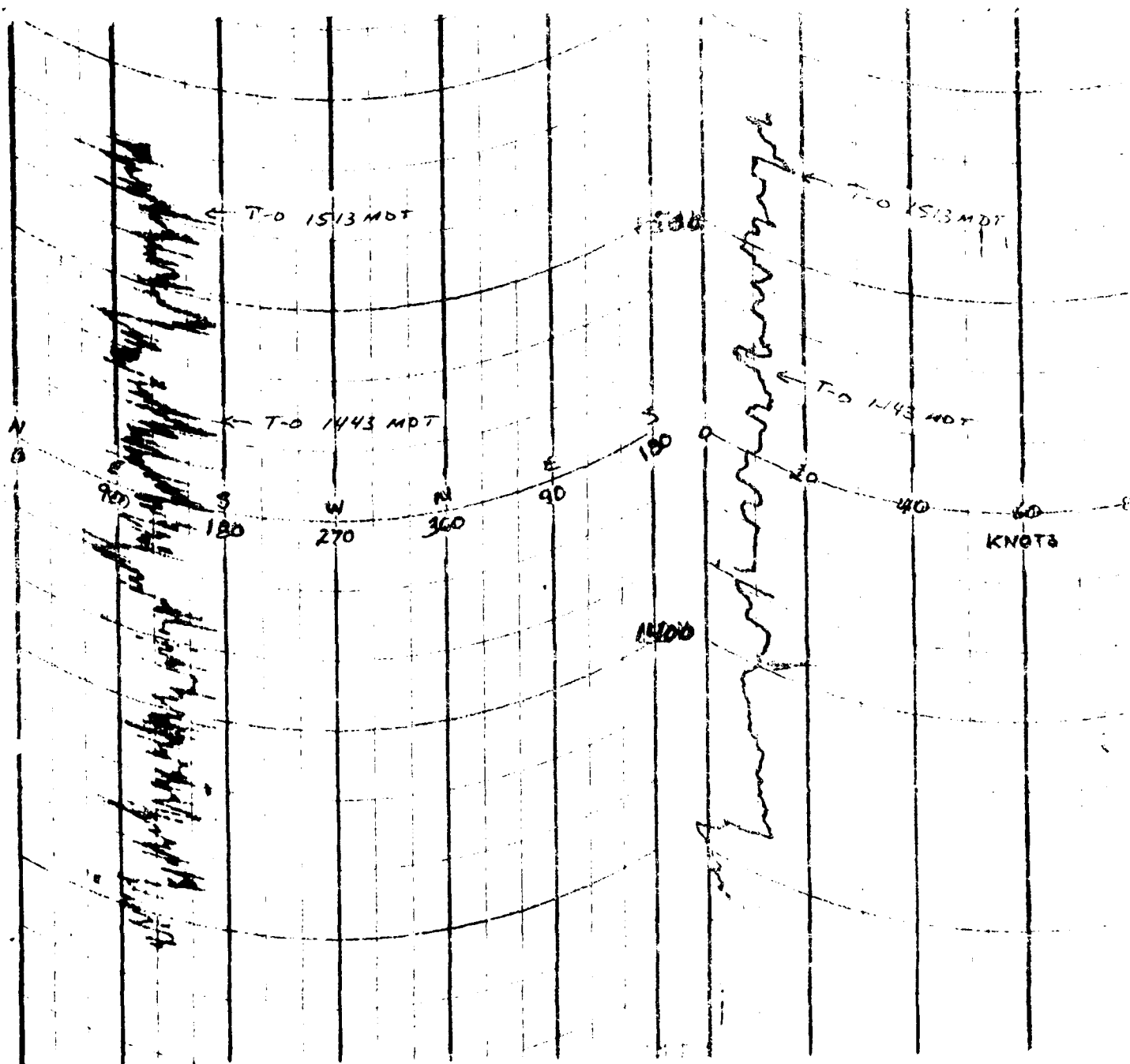


TABLE 5

T-TIME PILOT-BALLOON MEASURED WIND DATA

DATE 30 July 1984

SITE: D34
 TIME: 1445 MDT
 WSTM COORDINATES:
 X= 441,072.67
 Y= 386,316.94
 H= 4,008.31

SITE: Deadhorse
 TIME: 1444 MDT
 WSTM COORDINATES:
 X= 549,932.11
 Y= 490,249.23
 H= 4,133.12

LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS
SURFACE	150	04
150	093	11
210	094	10
270	095	08
330	100	07
390	107	07
500	111	06
650		
800		
950		
1150		
1350		
1550		
1750		
2000		

LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS
SURFACE	160	05
150	200	05
210	220	05
270	220	04
330	220	04
390	330	02
500	180	05
650	170	10
800	170	12
950	170	13
1150	160	08
1350	170	03
1550	ENTERED CLOUDS	
1750		
2000		

Data obtained from Double theodolite tracked Pilot-balloon observations.

TABLE 6

T-TIME PILOT-BALLOON MEASURED WIND DATA

DATE 30 July 1984

SITE: D3 $\frac{1}{2}$
TIME: 1514 MDT
WSTM COORDINATES:
X= 441,092.67
Y= 386,316.94
H= 4,008.31

SITE: Deadhorse
TIME 1515 MDT
WSTM COORDINATES:
X= 519,982.11
Y= 490,249.23
H= 4,133.12

LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS
SURFACE	150	03
150	104	13
210	105	12
270	108	10
330	110	08
390	106	06
500	111	05
650		
800		
950		
1150		
1350		
1550		
1750		
2000		

LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS
SURFACE	150	05
150	160	05
210	150	06
270	150	06
330	160	06
390	170	05
500	160	07
650	170	04
800	190	03
950	220	02
1150		
1350		
1550		
1750		
2000		

Data obtained from Double Theodolite Tracked Pilot-Balloon Observations

TABLE 7

AIMING AND T-TIME COMPUTER MET MESSAGE DATA

30 July 1984

WSD 0845 MDT	NW-30 1130 MDT	JALLEN 1211 MDT	JALLEN 1444 MDT
METCM1324064	METCM1329065	METCM1332065	METCM1332065
301480122884	301750123883	301820124880	302070124878
00000000 29870884	00107001 30350883	00391005 30710880	00373010 30950878
01300005 29710873	01204001 30110873	01274007 30450870	01296013 30560869
02323011 29520849	02126004 29810849	02313005 30130845	02281005 30320845
03336011 29330810	03367002 29510811	03290006 29710808	03241006 29900807
04270009 28960764	04438004 29120765	04124001 29200763	04225006 29400762
05202006 28670720	05391002 28680721	05627005 28720719	05188004 28920719
06148008 28100678	06167006 28300679	06225004 28320678	06189003 28440677
07214007 27710638	07226008 27890639	07300007 27870638	07300005 27970638
08197012 27440600	08223014 27460601	08255011 27420600	08308005 27540600
09210016 27020563	09237016 27130565	09258012 27100563	09219007 27220563
10235011 26870529	10309008 26980530	10347006 26910529	10190003 26910529
11260003 26790496	11530005 26880498	11004005 26830496	11096008 26720497
12170002 26150451	12079007 26420452	12065010 26300451	12081009 26290451
13132004 25570395	13115006 25650397	13101008 25560395	13079006 25560395
14111008 24630345	14149005 24920347	14123007 24820345	14020003 24790345
15159008 24140300	15086003 24150302	15081003 24040300	15030005 24020300
16181013 22990260	16188011 23320261	16197008 23240260	16146005 23260260
17185011 22300223	17198013 22560225	17199011 22460224	17143014 22480224
18157013 21490191	18180016 21780193	18191019 21670192	18139018 21640192
19161020 20820163	19184021 20950165	19160018 20940164	19134013 20890164
20207007 20280138	20121002 20480140	20082008 20380139	20618009 20500139
21041014 20280117	21068016 20540119	21077018 20410118	21096019 20270118
22144013 20480099	22168010 20610101	22160010 20540100	22138010 20510100
23150016 20690084	23125017 20940085	23114016 20720085	23114017 20730085
24144019 21190071	24180020 21190073	24179023 21040072	24178013 21060072
25134017 21290061	25160018 21370062	25152018 21370061	25164020 21330061
26155030 21350052	26164028 21570053	26157025 21730052	26166026 21540052

STATION ALTITUDE 3989.00 FEET MSL
 TO JULY 84
 ASCENSION NO. 395 0845 MDT

SIGNIFICANT LEVEL DATA
 2120020395
 WHITE SANDS

GEODETIC COORDINATES
 32.40043 LAT DEG
 106.37033 LON DEG

TABLE 8

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE		REL-HUM. PERCENT
	23.7	12.7	50.0
883.5	3989.0	12.0	50.0
874.9	4269.7	10.2	50.0
850.0	5094.2	5.3	44.0
795.7	6964.7	5.5	63.0
726.6	9500.1	1.8	55.0
700.0	10525.5	-0.7	58.0
688.5	11755.8	-1.0	62.0
604.4	14472.7	-5.5	72.0
584.0	15376.8	-2.7	65.0
577.1	15688.3	-3.6	62.0
569.2	16049.4	-15.7	36.0
564.9	16246.5	-17.2	36.0
558.0	16567.0	-23.0	21.0
543.2	17255.4	-25.2	16.0
531.2	17844.8	-27.2	17.0
518.0	18407.4	-32.5	23.0
500.0	19414.1	-45.5	25.0
497.9	19523.2	-50.8	26.0
476.8	20541.5		
460.0	25072.3		
427.8	26475.9		
400.0	31965.4		
374.1	34035.8		
350.0	36099.5		
320.0	40923.1		
326.9	44654.9		
300.0	46786.4		
274.9	47467.9		
251.1	47991.6		
244.9	50392.0		
238.4	51411.3		
207.9	58275.2		
200.0	54765.8		
236.9	60055.5		
200.0	61994.2		
170.0	62970.0		
165.1	61434.2		
150.0	68968.9		
143.9	71699.3		
135.5	75626.4		

STATION ALTITUDE 12-2-00 FEET MSL
 30 JULY 81
 ASCENSION NO. 125

0845 MDT

SIGNIFICANT LEVEL DATA
 210023395
 WHITE SANDS

GEOGRAPHIC COORDINATES
 32.40043 LAT DEG
 156.17033 LON DEG

TABLE 8 Cont'd

PRESSURE	GEOMETRIC	TEMPERATURE	REL. HUM.
WILLIAMS	ALTITUDE	AIR	DE-POINT
MSL	FEET	DEGREES	PERCENT
		CENTIGRADE	
30.0	79520.9	-53.4	
29.0	58626.0	-44.7	
17.3	97700.1	-39.1	
10.0	104264.0	-38.8	
9.4	105672.0	-36.9	

UPPER AIR DATA

STATION ALTITUDE 3959.0 FEET MSL
 TO JULY 84
 ASCENSION NO. 394

GEODETIC COORDINATES
 32.40043 LAT DEG
 106.17033 LON DEG

0845 MDT
 WHITE SANDS

TABLE 9

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL-HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGR(FE)(N)	SPEED KNOTS	
3959.0	653.5	23.7	50.0	1030.3	673.3	0	0	1.000393
4000.0	653.2	23.7	50.0	1030.0	673.3	193.6	.1	1.000393
4500.0	657.9	22.4	50.0	1016.8	671.5	193.6	3.7	1.000386
5000.0	652.8	21.2	50.0	1007.6	670.3	197.6	7.4	1.000379
5500.0	637.9	20.5	48.7	988.7	659.4	193.6	11.0	1.000272
6000.0	623.3	19.9	47.1	973.6	658.5	191.4	11.4	1.000265
6500.0	608.9	19.3	45.5	958.8	657.9	187.5	11.0	1.000259
7000.0	794.7	18.7	44.3	944.2	667.1	172.8	10.6	1.000253
7500.0	730.6	17.4	48.0	931.5	665.6	161.3	10.2	1.000251
8000.0	756.7	16.1	51.8	918.9	664.2	153.8	9.2	1.000248
8500.0	753.1	14.9	55.5	906.6	662.7	148.8	8.0	1.000245
9000.0	739.7	13.6	59.3	894.5	661.2	141.9	6.7	1.000242
9500.0	725.6	12.3	63.0	882.6	659.8	122.1	5.9	1.000239
10000.0	713.5	11.4	59.1	869.9	658.5	89.5	6.0	1.000231
10500.0	700.7	10.4	55.2	857.4	657.3	80.2	7.0	1.000224
11000.0	687.9	9.1	56.1	846.0	655.7	78.9	7.7	1.000219
11500.0	675.4	7.7	57.4	834.8	654.0	65.8	5.0	1.000213
12000.0	663.0	6.4	60.4	823.4	652.5	101.1	8.0	1.000212
12500.0	650.7	5.1	65.6	811.8	651.0	112.7	8.0	1.000205
13000.0	638.0	3.9	70.8	800.5	649.5	117.1	7.5	1.000207
13500.0	626.8	2.6	75.9	789.3	648.0	115.3	7.8	1.000204
14000.0	615.2	1.3	81.1	778.7	646.5	111.1	8.6	1.000201
14500.0	603.5	.1	85.3	767.3	645.0	110.8	10.5	1.000196
15000.0	592.4	-1.5	72.0	755.0	644.1	111.3	12.6	1.000190
15500.0	581.3	-1.5	66.0	743.6	642.9	111.5	15.4	1.000184
16000.0	570.3	-3.0	67.7	732.7	641.5	115.4	16.9	1.000181
16500.0	559.4	-3.3	62.6	720.8	640.5	119.9	17.7	1.000176
17000.0	548.3	-3.8	45.9	708.7	639.9	146.6	14.1	1.000169
17500.0	538.1	-4.1	36.0	696.2	639.4	134.8	14.4	1.000164
18000.0	528.0	-4.3	32.4	683.4	639.1	137.0	11.8	1.000160
18500.0	517.9	-3.9	21.0	669.7	639.5	119.5	8.9	1.000157
19000.0	508.1	-4.2	18.3	657.7	639.1	141.0	5.5	1.000151
19500.0	498.3	-4.3	16.0	645.3	639.0	140.0	2.4	1.000147
20000.0	488.9	-5.1	16.4	634.8	638.1	230.2	.4	1.000145
20500.0	479.4	-5.9	15.9	624.7	637.0	331.0	.4	1.000143
21000.0	470.1	-7.0	17.6	615.1	635.7	39.2	.8	1.000140
21500.0	460.9	-8.2	15.4	605.7	634.2	98.1	1.4	1.000136
22000.0	451.4	-9.4	19.1	596.5	632.8	109.9	2.5	1.000136
22500.0	442.9	-10.6	19.9	587.5	631.4	104.1	3.7	1.000134
23000.0	434.2	-11.8	20.7	578.5	630.0	98.1	4.2	1.000132

UPPER AIR DATA
210000Z0396
WHITE SANDS

GEODETIC COORDINATES
32-40043 LAT DEG
106-37033 LON DEG

STATION ALTITUDE 3949.00 FEET MSL
30 JULY 54
ASCENSION NO. 324
0845 MDT

TABLE 9 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	TEMPERATURE DE-POINT CELSIUS	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
23500.0	425.7	-13.0	-30.4	21.5	569.8	628.5	89.4	4.1	1.000130
24000.0	417.4	-14.2	-31.0	22.3	561.2	627.1	82.5	3.9	1.000126
24500.0	409.2	-15.3	-31.7	23.1	552.7	625.6	77.6	3.6	1.000126
25000.0	401.1	-16.5	-32.3	23.9	544.4	624.2	72.9	3.8	1.000124
25500.0	393.1	-17.6	-33.4	23.7	535.7	622.9	69.2	4.1	1.000121
26000.0	385.2	-18.7	-34.4	23.5	527.2	621.6	65.3	4.5	1.000119
26500.0	377.4	-19.8	-35.5	23.0	518.7	620.2	62.5	5.1	1.000117
27000.0	369.5	-20.9	-36.5	23.0	510.3	618.9	67.0	6.0	1.000115
27500.0	361.9	-22.1	-37.5	23.0	502.0	617.4	65.1	7.0	1.000113
28000.0	354.5	-23.3	-38.5	23.0	493.9	615.9	62.2	7.9	1.000111
28500.0	347.0	-24.4	-39.5	23.0	485.9	614.5	61.2	8.4	1.000109
29000.0	339.8	-25.6	-40.5	23.0	478.1	613.0	61.7	8.7	1.000108
29500.0	332.8	-26.7	-41.5	23.0	470.4	611.6	63.2	9.2	1.000106
30000.0	325.9	-27.9	-42.5	23.0	462.8	610.1	66.1	7.3	1.000104
30500.0	319.1	-29.1	-43.5	23.0	455.4	608.7	69.7	6.7	1.000102
31000.0	312.5	-30.2	-44.6	23.0	448.0	607.2	72.8	6.1	1.000101
31500.0	306.0	-31.4	-45.6	23.0	440.9	605.8	73.3	6.5	1.000099
32000.0	299.6	-32.6	-46.6	23.0	433.8	604.3	74.1	7.5	1.000097
32500.0	293.1	-34.1	-47.6	23.8	427.1	602.4	77.1	8.6	1.000096
33000.0	286.5	-35.5	-48.6	24.5	420.5	600.6	79.7	10.4	1.000094
33500.0	280.0	-37.0	-49.6	25.2	414.0	598.7	102.6	11.8	1.000093
34000.0	274.5	-38.5	-50.7	25.9	407.6	596.8	104.1	13.2	1.000091
34500.0	268.5	-39.7	-53.9	20.2**	400.7	595.3	107.1	11.4	1.000090
35000.0	262.0	-40.9	-57.9	13.6**	393.8	593.7	105.8	13.1	1.000088
35500.0	255.8	-42.1	-53.5	7.6**	387.1	592.2	99.9	12.1	1.000086
36000.0	251.1	-43.3	-76.6	1.3**	380.5	590.7	97.1	13.3	1.000085
36500.0	245.4	-44.5			373.9	589.2	99.7	12.6	1.000083
37000.0	239.8	-45.6			367.1	587.7	102.2	11.9	1.000082
37500.0	234.3	-46.8			360.6	586.1	102.7	12.7	1.000080
38000.0	229.0	-48.1			354.2	584.6	110.5	9.3	1.000079
38500.0	223.7	-49.1			347.9	583.1	109.5	9.1	1.000077
39000.0	219.0	-50.1			341.7	581.6	106.7	9.1	1.000076
39500.0	213.2	-51.4			335.7	580.0	102.3	9.8	1.000075
40000.0	208.7	-52.4			329.7	578.5	100.4	10.5	1.000073
40500.0	204.1	-53.8			323.9	577.0	96.1	10.8	1.000072
41000.0	199.3	-55.0			318.2	575.4	86.0	11.7	1.000071
41500.0	194.5	-56.3			312.4	573.7	84.1	13.0	1.000070
42000.0	189.8	-57.5			306.7	572.1	84.1	14.4	1.000068
42500.0	185.2	-58.8			301.1	570.4	81.8	15.7	1.000067
43000.0	180.6	-60.2			295.6	568.7	87.6	16.1	1.000066

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

UPPER AIR DATA
212000Z395
WHITE SANDS

STATION ALTITUDE 3929.00 FEET MSL
30 JULY 94
ASCENSION NO. 395 0845 MDT

GEOMETRIC COORDINATES
32.40043 LAT DEG
106.17033 LON DEG

TABLE 9 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE WILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL-HUM. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND		WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
					METER	KNOTS			
43500.0	176.5	-61.3		290.2	557.0		89.3	16.4	1.000065
44000.0	172.3	-62.6		285.0	555.4		89.1	17.2	1.000063
44500.0	168.2	-63.6		279.8	553.7		89.0	19.2	1.000062
45000.0	164.0	-64.9		274.4	552.2		89.7	20.3	1.000061
45500.0	160.0	-65.9		269.0	550.8		90.3	22.4	1.000060
46000.0	155.0	-67.0		263.6	559.4		91.9	23.6	1.000059
46500.0	152.2	-68.0		258.4	558.0		93.9	23.9	1.000058
47000.0	148.4	-68.9		253.1	556.7		98.5	21.1	1.000056
47500.0	144.7	-69.6		247.6	555.8		104.5	18.2	1.000055
48000.0	141.0	-68.6		240.2	557.2		118.4	11.4	1.000053
48500.0	137.5	-68.9		234.6	556.7		154.6	6.4	1.000052
49000.0	134.1	-69.3		229.1	556.3		213.6	5.4	1.000051
49500.0	130.7	-69.5		223.7	555.8		251.0	8.6	1.000050
50000.0	127.4	-69.9		218.4	555.4		281.1	8.6	1.000049
50500.0	124.2	-70.0		213.0	555.3		305.9	10.6	1.000047
51000.0	121.1	-69.1		206.6	556.5		349.7	12.7	1.000046
51500.0	118.1	-68.5		201.0	557.4		12.9	18.2	1.000045
52000.0	115.1	-68.9		196.3	556.8		31.1	28.5	1.000044
52500.0	112.2	-69.3		191.8	556.3		44.3	23.0	1.000043
53000.0	109.4	-69.7		187.3	555.7		55.3	21.5	1.000042
53500.0	106.7	-69.9		182.8	555.6		66.5	20.1	1.000041
54000.0	104.0	-69.9		178.2	555.6		72.6	17.0	1.000040
54500.0	101.4	-69.9		173.8	555.4		80.3	14.5	1.000039
55000.0	98.9	-69.5		169.1	556.0		87.1	12.8	1.000038
55500.0	96.4	-68.5		164.2	557.3		92.5	11.7	1.000037
56000.0	94.1	-67.6		159.4	558.5		89.1	11.3	1.000036
56500.0	91.8	-66.7		154.8	559.8		84.7	11.3	1.000034
57000.0	89.5	-65.7		150.3	561.1		78.2	12.1	1.000033
57500.0	87.3	-64.8		146.0	562.4		74.4	13.3	1.000033
58000.0	85.2	-63.8		141.8	563.6		79.7	15.9	1.000032
58500.0	83.1	-62.9		137.7	564.9		82.1	18.3	1.000031
59000.0	81.0	-62.0		133.7	566.1		86.7	19.7	1.000031
59500.0	79.1	-61.0		129.8	567.4		90.4	21.0	1.000029
60000.0	77.1	-60.1		126.1	568.6		92.1	20.9	1.000028
60500.0	75.3	-60.0		123.0	568.8		94.2	20.9	1.000027
61000.0	73.5	-60.0		120.0	568.8		92.9	19.8	1.000027
61500.0	71.7	-59.5		117.1	568.9		90.3	18.5	1.000026
62000.0	70.0	-59.9		114.3	568.9		87.3	17.3	1.000025
62500.0	68.3	-59.3		111.3	569.7		81.9	16.1	1.000025
63000.0	66.7	-59.1		108.5	570.0		75.4	15.2	1.000024

UPPER AIR DATA
212000Z396
WHITE SANDS

STATION ALTITUDE 3959.00 FEET MSL
10 JULY 64
ASCENSION NO. 396

0845 MDT

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

TABLE 9 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	SOUND METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES (TN)	SPEED KNOTS	
63500.0	55.1	-50.4		106.6	568.2	74.7	15.1	1.000024
64000.0	53.5	-50.1		107.9	568.5	73.9	15.2	1.000023
64500.0	52.0	-50.5		101.3	569.0	70.7	16.0	1.000023
65000.0	50.5	-50.5		98.7	569.4	58.0	17.4	1.000022
65500.0	50.1	-50.1		96.2	569.9	57.8	19.2	1.000021
66000.0	57.7	-58.9		93.8	570.3	69.6	21.8	1.000021
66500.0	56.3	-58.4		91.4	570.7	71.2	24.4	1.000020
67000.0	55.0	-58.3		89.1	571.1	77.8	26.7	1.000020
67500.0	53.7	-58.0		86.9	571.5	82.6	29.4	1.000019
68000.0	52.4	-57.7		84.7	571.9	85.8	30.9	1.000019
68500.0	51.1	-57.4		82.6	572.3	90.0	31.9	1.000018
69000.0	49.9	-57.3		80.5	572.7	93.7	32.7	1.000018
69500.0	48.6	-56.6		78.5	573.0	94.1	32.5	1.000017
70000.0	47.6	-55.5		76.6	573.4	94.5	32.3	1.000017
70500.0	46.3	-56.0		74.7	573.7	94.8	33.0	1.000017
71000.0	45.4	-56.0		72.8	574.1	94.2	33.4	1.000016
71500.0	44.7	-55.7		71.0	574.5	94.7	34.0	1.000016
72000.0	43.3	-55.3		69.2	574.9	93.0	34.7	1.000015
72500.0	42.3	-54.7		67.4	575.8	91.0	35.4	1.000015
73000.0	41.7	-54.2		65.7	576.5	88.0	36.1	1.000015
73500.0	40.9	-53.6		64.0	577.2	87.0	37.0	1.000015
74000.0	39.1	-53.1		62.4	577.9	87.0	37.7	1.000014
74500.0	38.0	-52.1		60.6	578.6	86.0	38.0	1.000014
75000.0	37.0	-52.0		59.1	579.4	86.0	38.0	1.000014
75500.0	36.0	-51.4		57.1	580.1	85.0	38.0	1.000014
76000.0	35.0	-51.4		56.4	580.0	84.0	38.0	1.000014
76500.0	34.0	-51.4		55.1	579.7	83.0	38.0	1.000014
77000.0	33.0	-51.4		53.9	579.4	82.0	38.0	1.000014
77500.0	32.0	-51.4		52.9	579.0	81.0	38.0	1.000014
78000.0	30.0	-51.4		51.4	578.7	80.0	38.0	1.000014
78500.0	29.0	-51.4		50.4	578.4	79.0	38.0	1.000014
79000.0	28.0	-51.4		49.1	578.1	78.0	38.0	1.000014
79500.0	27.0	-51.4		48.0	577.7	77.0	38.0	1.000014
80000.0	26.0	-51.4		47.1	577.7	76.0	38.0	1.000014
80500.0	25.0	-51.4		46.0	577.4	75.0	38.0	1.000014
81000.0	24.0	-51.4		44.8	577.0	74.0	38.0	1.000014
81500.0	23.0	-51.4		43.7	576.7	74.0	38.0	1.000014
82000.0	22.0	-51.4		42.6	576.3	73.0	38.0	1.000014
82500.0	21.0	-51.4		41.5	576.0	72.0	38.0	1.000014
83000.0	20.0	-51.4		40.5	575.6	71.0	38.0	1.000014

STATION ALTITUDE 1989.00 FEET TSL
30 JULY 86 0045 MPT
ASCENSION NO. 396

UPPER AIR DATA
210000395
WHITE SANDS

GEODETTIC COORDINATES
32.40043 LAT DEG
106.77033 LON DEG

TABLE 9 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES C	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND METER	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
9300.0	25.3	-49.8			39.5	582.3	86.2	33.7	1.000009
9400.0	24.7	-49.3			38.5	582.9	86.1	34.2	1.000009
9500.0	24.2	-49.8			37.4	583.5	86.7	34.6	1.000008
9600.0	23.5	-48.3			36.6	584.2	85.1	35.6	1.000008
9700.0	23.1	-47.8			35.7	584.8	84.7	36.8	1.000008
9800.0	22.6	-47.3			34.8	585.5	83.1	37.9	1.000006
9900.0	22.1	-46.8			33.9	586.1	84.6	38.9	1.000006
10000.0	21.5	-46.3			33.1	586.8	86.6	39.9	1.000007
10100.0	21.1	-45.8			32.3	587.4	88.5	40.9	1.000007
10200.0	20.6	-45.3			31.5	588.0	91.5	41.1	1.000007
10300.0	20.1	-44.8			30.7	588.7	94.7	41.2	1.000007
10400.0	19.7	-44.5			30.0	589.1	97.9	41.4	1.000007
10500.0	19.2	-44.2			29.3	589.5	98.7	40.6	1.000007
10600.0	18.8	-43.9			28.6	589.9	99.0	39.5	1.000006
10700.0	18.4	-43.6			27.9	590.3	99.3	38.4	1.000006
10800.0	18.0	-43.2			27.3	590.7	98.6	38.2	1.000006
10900.0	17.5	-42.9			26.6	591.1	97.6	38.2	1.000006
11000.0	17.2	-42.6			26.0	591.5	96.6	38.2	1.000006
11100.0	16.8	-42.3			25.4	591.9	95.6	38.7	1.000006
11200.0	16.5	-42.0			24.8	592.3	94.5	39.2	1.000006
11300.0	16.1	-41.7			24.2	592.7	93.5	39.8	1.000005
11400.0	15.7	-41.4			23.7	593.1	92.5	41.6	1.000005
11500.0	15.4	-41.1			23.1	593.4	91.5	44.0	1.000005
11600.0	15.1	-40.8			22.6	593.8	90.6	46.4	1.000005
11700.0	14.7	-40.5			22.0	594.2	90.7	47.2	1.000005
11800.0	14.4	-40.2			21.5	594.5	89.4	47.2	1.000005
11900.0	14.1	-39.9			21.0	595.0	88.9	47.2	1.000005
12000.0	13.8	-39.6			20.5	595.4	88.3	46.8	1.000005
12100.0	13.5	-39.3			20.1	595.8	87.6	46.3	1.000004
12200.0	13.2	-39.1			19.6	596.3	87.0	45.7	1.000004
12300.0	12.9	-39.1			19.2	596.7	86.6	45.4	1.000004
12400.0	12.6	-39.0			18.8	596.1	87.1	45.7	1.000004
12500.0	12.3	-39.0			18.3	596.1	87.5	46.0	1.000004
12600.0	12.1	-39.0			17.9	596.1	87.9	46.3	1.000004
12700.0	11.9	-39.0			17.6	596.2	88.7	45.8	1.000004
12800.0	11.5	-39.0			17.2	596.2	89.9	44.8	1.000004
12900.0	11.3	-38.9			16.8	596.2	91.2	43.7	1.000004
13000.0	11.0	-38.9			16.4	596.3	92.5	42.7	1.000004
13100.0	10.6	-38.9			16.1	596.3			1.000004
13200.0	10.4	-38.9			15.7	596.3			1.000003

UPPER AIR DATA
212000Z0394
WHITE SANDS

STATION ALTITUDE 2669.00 FEET MSL
10 JULY 70 0945 MDT
ASCENSION NO. 39

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 9 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
103500.0	10.7	-35.5		15.4	596.3			1.000003
104000.0	10.1	-35.5		15.0	596.4			1.000003
104500.0	9.9	-35.5		14.7	596.4			1.000003
105000.0	9.7	-35.5		14.4	596.3			1.000003
105500.0	9.5	-35.5		14.1	596.3			1.000003

STATION ALTITUDE 1009.00 FEET MSL
 13 JULY 64
 ASCENSION NO. 395

MAJORITY LEVELS
 2120020395
 WHITE SANDS

GEODETIC COORDINATES
 32.4043 LAT DEG
 106.37033 LON DEG

TABLE 10

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	WIND DATA	
				DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	5090.	21.0	50.	193.6	6.0
800.0	5907.	19.0	44.	175.6	10.6
750.0	6614.	14.6	50.	167.7	7.7
700.0	7315.	10.4	55.	79.6	7.1
650.0	7922.	5.1	60.	113.0	0.0
600.0	8648.	-1.1	81.	110.7	11.1
550.0	9320.	-7.8	48.	125.5	16.6
500.0	9935.	-4.5	16.	145.2	2.9
450.0	10385.	-9.7	19.	108.2	2.7
400.0	10930.	-16.7	24.	72.3	3.0
350.0	11576.	-23.9	23.	51.1	8.1
300.0	12105.	-32.5	23.	83.0	7.0
250.0	12619.	-43.5		97.5	13.7
200.0	13023.	-54.9		91.1	11.5
175.0	13580.	-61.7		99.1	16.7
150.0	14058.	-68.6		95.2	22.4
125.0	15030.	-70.2		299.0	9.9
100.0	15459.	-69.0		81.3	13.7
50.0	15907.	-61.5		55.	21.4
70.0	16780.	-59.0		87.4	17.1
60.0	16942.	-59.4		57.1	17.9
50.0	16707.	-57.1		93.1	30.7
40.0	17373.	-53.4		90.7	16.
30.0	17947.	-53.4		89.1	25.1
20.0	18361.	-48.6		85.	11.0
10.0	18909.	-44.7		95.0	13.
15.0	19579.	-40.8		90.7	40.
10.0	103693.	-38.8			

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 5174 FEET MSL
 10 JULY 64
 ASCENSION NO. 1230

SIGNIFICANT LEVEL DATA
 1000220017
 N= 10

STATION ALTITUDE 5174 FEET MSL
 10 JULY 64
 ASCENSION NO. 1230

REL. HUM.
 PERCENT

TEMPERATURE
 AIR DEWPOINT
 WINDSPEED DIRECTION

TEMPERATURE
 ALTITUDE
 WINDSPEED DIRECTION

5174	401.0	5.0	11.5	40.0
4774	400.0	5.0	11.5	39.0
4574	400.0	5.0	11.5	40.0
4374	400.0	5.0	11.5	41.0
4174	400.0	5.0	11.5	44.0
3974	400.0	5.0	11.5	43.0
3774	400.0	5.0	11.5	48.0
3574	400.0	5.0	11.5	71.0
3374	400.0	5.0	11.5	62.0
3174	400.0	5.0	11.5	75.0
2974	400.0	5.0	11.5	72.0
2774	400.0	5.0	11.5	85.0
2574	400.0	5.0	11.5	70.0
2374	400.0	5.0	11.5	41.0
2174	400.0	5.0	11.5	22.0
1974	400.0	5.0	11.5	17.0
1774	400.0	5.0	11.5	5.0
1574	400.0	5.0	11.5	17.0
1374	400.0	5.0	11.5	20.0
1174	400.0	5.0	11.5	21.0
974	400.0	5.0	11.5	22.0
774	400.0	5.0	11.5	26.0

STATION ALTITUDE 6010.0 FEET MSL
 30 JULY 64 1150 MDT
 ASCENSION NO. 17

UPPER AIR DATA
 120220017
 4-75

GEODETIC COORDINATES
 32.86497 LAT DEG
 106.49714 LON DEG

TABLE 12

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (TN) SPEED KNOTS	INDEX OF REFRACTION
6010.0	653.2	26.7	40.0	1013.5	678.8	60.0	1.000290
4500.0	858.4	25.6	39.1	1006.8	675.3		1.000279
5000.0	833.5	24.0	40.4	993.2	673.4		1.000274
5500.0	838.6	22.2	41.6	984.1	671.3		1.000268
6000.0	824.0	21.4	42.4	969.9	670.2		1.000263
6500.0	809.7	20.5	43.2	955.9	669.2	205.8	1.000259
7000.0	795.4	19.6	44.0	942.1	668.2	227.7	1.000254
7500.0	781.1	18.3	47.1	929.7	666.7	239.0	1.000251
8000.0	757.0	16.9	50.3	917.5	665.1	245.3	1.000248
8500.0	754.0	15.6	53.5	905.5	663.5	246.4	1.000245
9000.0	740.2	14.2	56.7	893.6	661.9	246.5	1.000241
9500.0	727.4	12.8	59.9	882.0	660.3	232.7	1.000238
10000.0	714.5	11.5	63.1	870.5	658.8	194.0	1.000234
10500.0	701.6	10.7	67.2	857.3	657.9	105.5	1.000232
11000.0	685.9	9.6	66.7	845.0	656.6	94.7	1.000226
11500.0	675.4	8.7	51.7	833.3	655.1	95.0	1.000213
12000.0	654.3	7.5	51.7	821.6	653.7	107.7	1.000209
12500.0	651.3	6.2	50.5	810.1	652.2	116.0	1.000207
13000.0	635.4	5.0	61.4	798.8	650.8	126.7	1.000204
13500.0	626.4	3.7	66.0	787.9	649.2	127.9	1.000202
14000.0	615.4	2.3	70.5	777.1	647.5	127.4	1.000198
14500.0	604.3	1.0	75.0	766.6	645.9	125.7	1.000193
15000.0	593.1	0.0	72.0	755.5	644.5	126.3	1.000187
15500.0	582.0	-1.7	60.1	744.0	643.3	126.3	1.000183
16000.0	571.4	-3.0	63.1	732.5	642.2	121.0	1.000179
16500.0	550.3	-4.3	78.2	720.4	641.2	135.5	1.000174
17000.0	549.4	-5.7	56.0	708.2	640.7	144.4	1.000170
17500.0	539.4	-7.0	34.5	695.8	640.3	155.3	1.000166
18000.0	529.9	-8.7	22.4	683.5	639.8	169.7	1.000162
18500.0	514.1	-10.0	20.6	670.9	639.5	182.0	1.000158
19000.0	504.1	-11.3	18.7	658.5	639.4	211.0	1.000154
19500.0	490.4	-12.6	17.4	646.4	639.1	207.0	1.000150
20000.0	483.4	-13.9	23.7	636.1	638.1	180.0	1.000146
20500.0	483.0	-15.2	20.0	626.0	637.0	152.0	1.000142
21000.0	471.0	-16.0	36.5	616.1	635.9	20.0	1.000138
21500.0	462.0	-17.3	42.7	606.2	634.8	25.0	1.000134
22000.0	453.0	-18.6	42.7	597.0	633.5	23.0	1.000130
22500.0	444.0	-19.9	29.1	587.9	632.0	4.0	1.000126
23000.0	435.4	-21.2	35.5	579.0	630.5	10.0	1.000122
23500.0	426.3	-22.5	41.9	570.3	629.1	50.0	1.000118

WIND DATA INCLINED DUE TO MISSING RAW WIND DATA AND ELEVATION ANGLE

GEODETIC COORDINATES
32.88497 LAT DEG
106.49714 LON DEG

UPPER AIR DATA
210202Z0017
NW 30

STATION ALTITUDE 6010.40 FEET MSL
10 JULY 50
ASCENSION NO. 17 1130 MDT

TABLE 12 Cont'd

GEODETIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
24000.0	419.5	-13.7	28.2	561.5	527.5	58.4	9.0	1.000126
24500.0	410.2	-14.9	24.0	553.1	626.2	61.6	7.7	1.000126
25000.0	402.1	-16.1	21.0	544.8	624.7	66.7	6.5	1.000123
25500.0	394.0	-17.2	20.1	536.1	623.4	71.3	6.0	1.000121
26000.0	386.0	-18.2	20.2	527.5	622.0	77.0	5.5	1.000119
26500.0	378.2	-19.4	20.4	519.0	620.7	79.4	5.6	1.000117
27000.0	370.5	-20.4	20.5	510.5	619.4	81.5	5.6	1.000115
27500.0	363.0	-21.5	20.6	502.4	618.1	80.7	5.5	1.000113
28000.0	355.5	-22.6	20.7	494.3	616.7	79.2	5.5	1.000111
28500.0	348.4	-23.7	20.9	486.4	615.4	80.4	5.4	1.000109
29000.0	341.3	-24.8	21.0	478.5	614.0	81.5	5.3	1.000108
29500.0	334.1	-26.0	21.2	470.8	612.6	88.3	3.5	1.000106
30000.0	327.1	-27.1	21.3	463.2	611.1	81.5	2.3	1.000104
30500.0	320.3	-28.3	21.5	455.7	609.5	80.4	2.7	1.000102
31000.0	313.5	-29.5	21.7	448.3	608.1	349.0	1.4	1.000101
31500.0	307.0	-30.7	21.8	441.1	606.5	22.4	2.0	1.000099
32000.0	300.4	-31.9	22.0	433.9	605.1	15.8	3.1	1.000097
32500.0	294.1	-33.2	22.7	426.9	603.5	75.0	5.0	1.000096
33000.0	287.7	-34.5	23.4	420.0	601.9	58.1	6.8	1.000094
33500.0	281.2	-35.8	24.1	413.2	600.2	93.0	8.6	1.000092
34000.0	275.4	-37.1	24.8	406.5	598.5	95.4	10.3	1.000091
34500.0	269.5	-38.4	25.5	399.9	596.9	102.6	12.3	1.000089
35000.0	263.1	-39.7	26.5	393.2	595.3	107.0	14.3	1.000088
35500.0	257.1	-40.1	23.0	386.6	593.8	101.4	11.7	1.000086
36000.0	251.2	-42.0	13.3	380.2	592.2	108.5	11.6	1.000084
36500.0	245.4	-43.1	3.2	373.4	590.8	107.7	11.2	1.000083
37000.0	240.0	-44.1		366.7	589.3	114.3	11.2	1.000081
37500.0	235.1	-45.1		360.1	587.6	117.2	12.1	1.000080
38000.0	230.4	-46.1		353.7	586.0	114.9	13.1	1.000078
38500.0	226.0	-47.2		347.4	584.4	115.7	13.2	1.000077
39000.0	221.7	-48.3		341.1	583.4	114.7	13.5	1.000075
39500.0	216.7	-49.4		335.1	581.9	117.1	13.1	1.000073
40000.0	211.7	-50.5		329.4	580.5	121.1	13.4	1.000071
40500.0	207.1	-51.6		323.4	579.0	120.7	14.7	1.000069
41000.0	202.1	-52.7		317.5	577.5	99.3	14.7	1.000067
41500.0	197.5	-53.7		312.0	575.7	101.7	15.5	1.000065
42000.0	193.0	-54.7		306.5	574.0	101.4	16.7	1.000064
42500.0	188.4	-55.8		301.1	572.2	104.1	17.5	1.000062
43000.0	182.1	-56.8		295.7	570.4	104.0	15.7	1.000060
43500.0	177.1	-58.1		290.5	568.5	114.3	19.4	1.000058

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

UPPER AIR DATA

STATION ALTITUDE 4010.40 FEET MSL
30 JULY 84 1130 MDT
ASCENSION NO. 17

GEODETIC COORDINATES
32.88497 LAT DEG
106.49714 LON DEG

TABLE 12 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
4400.0	173.4	-51.5		285.4	566.8	104.0	20.2	1.000064
4500.0	159.2	-51.7		280.1	565.2	103.5	21.4	1.000062
4600.0	155.1	-52.7		274.6	563.8	103.4	22.6	1.000061
4500.0	151.0	-54.7		269.2	562.4	102.8	21.6	1.000060
4600.0	157.1	-65.8		263.9	561.0	102.1	20.0	1.000059
4600.0	153.2	-65.8		258.7	559.6	101.1	17.1	1.000058
4700.0	149.5	-67.7		253.5	558.4	99.3	13.4	1.000056
4750.0	145.7	-68.0		247.4	558.0	96.8	9.1	1.000055
4800.0	142.1	-68.2		241.5	557.7	90.1	4.0	1.000054
4800.0	138.5	-68.5		235.8	557.3	330.8	1.5	1.000053
4900.0	135.1	-68.7		230.2	557.0	305.5	5.6	1.000051
4900.0	131.7	-69.0		224.7	556.7	303.1	9.8	1.000050
5000.0	128.4	-69.1		219.2	556.5	333.3	10.6	1.000049
5000.0	125.2	-68.1		212.8	557.9	354.5	13.6	1.000047
5100.0	122.1	-67.2		206.6	559.1	16.4	15.6	1.000046
5100.0	119.1	-66.7		200.9	559.8	36.4	18.6	1.000045
5200.0	116.1	-67.4		196.6	558.8	49.6	20.9	1.000044
5200.0	113.2	-68.1		192.4	557.9	94.7	19.1	1.000043
5300.0	110.4	-68.7		188.1	557.0	78.0	18.0	1.000042
5300.0	107.5	-68.1		183.0	557.7	94.0	14.9	1.000041
5400.0	105.0	-67.1		178.0	558.4	92.1	12.1	1.000040
5450.0	102.4	-67.3		173.3	558.9	93.8	10.8	1.000039
5500.0	99.8	-67.1		168.7	559.3	94.4	9.5	1.000038
5500.0	97.3	-66.5		164.2	560.0	91.7	8.2	1.000037
5600.0	95.0	-66.0		159.8	560.7	86.1	8.1	1.000036
5650.0	92.1	-65.3		155.5	561.4	71.9	8.1	1.000035
5700.0	90.4	-64.1		151.2	562.1	66.9	9.0	1.000034
5750.0	88.1	-64.2		147.2	562.9	59.7	10.0	1.000033
5800.0	86.0	-63.2		143.2	563.5	51.0	10.7	1.000032
5850.0	83.9	-61.1		139.4	564.3	43.1	15.2	1.000031
5900.0	81.9	-60.1		135.6	565.0	76.4	20.3	1.000030
5950.0	79.2	-60.1		132.0	565.7	84.5	25.8	1.000029
6000.0	77.2	-60.1		128.4	566.4	90.8	27.7	1.000028
6050.0	75.1	-61.1		125.0	567.1	91.0	28.2	1.000027
6100.0	74.1	-61.0		122.0	567.1	99.6	25.8	1.000027
6150.0	72.4	-61.1		119.0	567.1	102.1	20.7	1.000027
6200.0	70.7	-61.2		116.2	567.1	103.7	17.5	1.000026
6250.0	69.2	-61.1		113.3	567.3	102.1	16.6	1.000025
6300.0	67.7	-60.7		110.4	567.8	100.3	15.8	1.000025
6350.0	66.2	-60.3		107.6	568.3	97.0	16.0	1.000024

UPPER AIR DATA

STATION ALTITUDE 4010.40 FEET MSL
 10 JULY 84
 ASCENSION NO. 17

GEODETIC COORDINATES
 32.88497 LAT DEG
 106.49714 LON DEG

TABLE 12 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
64000.0	64.1	-50.0		106.8	568.8	95.7	16.3	1.000023
64500.0	52.6	-59.6		122.1	569.3	93.1	17.4	1.000023
65000.0	51.1	-59.2		95.5	569.8	90.4	19.3	1.000022
65500.0	59.7	-58.6		97.0	570.3	88.5	21.3	1.000022
66000.0	59.2	-58.5		94.5	570.8	87.4	22.7	1.000021
66500.0	55.8	-55.1		92.1	571.3	86.3	24.2	1.000021
67000.0	55.5	-57.7		89.7	571.8	86.7	25.2	1.000020
67500.0	54.2	-57.4		87.5	572.2	89.1	25.6	1.000019
68000.0	52.9	-57.4		85.4	572.2	91.5	26.0	1.000019
68500.0	51.5	-57.4		83.4	572.2	92.9	26.5	1.000019
69000.0	50.4	-57.4		81.4	572.2	94.1	27.0	1.000018
69500.0	49.1	-55.7		79.2	573.1			1.000018
70000.0	48.1	-55.7		77.0	574.4			1.000017
70500.0	45.9	-54.8		74.9	575.7			1.000017

STATION ALTITUDE 4010.40 FEET MSL
 70 JULY 84
 ASCENSION NO. 17 1130 MDT

MANDATORY LEVELS
 2120220017
 NW 30
 TABLE 13

GEODETTIC COORDINATES
 32.88497 LAT DEG
 106.49714 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.		WIND DATA	
WILHELMARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT	PERCENT	DIRECTION DEGREES(TN)	SPEED KNOTS	
850.0	5114.	22.9	9.0	41.	9999.0	9999.0	9999.0
800.0	5439.	19.9	7.2	44.	222.3	1.5	
750.0	5850.	15.2	5.0	54.	246.4	3.5	
700.0	6254.	10.6	4.9	68.	105.0	4.6	
650.0	6665.	6.1	-1.7	57.	119.5	7.7	
600.0	7074.	4	-3.5	75.	125.8	14.5	
550.0	7482.	-1.2	-10.4	57.	143.9	12.3	
500.0	7884.	-4.1	-25.5	17.	285.3	3.4	
450.0	8285.	-9.4	-20.1	41.	45.4	7.8	
400.0	8682.	-16.4	-34.0	20.	57.2	6.4	
350.0	9073.	-23.4	-39.6	21.	50.3	5.4	
300.0	9457.	-32.0	-45.5	22.	56.9	3.5	
250.0	9831.	-42.5			108.5	11.	
200.0	10199.	-53.5			87.0	14.7	
175.0	10370.	-61.0			134.7	19.7	
150.0	10501.	-67.7			90.7	14.7	
125.0	10587.	-68.1			354.0	13.7	
100.0	10623.	-67.1			94.0	8.7	
80.0	10623.	-62.3			83.0	25.0	
70.0	10620.	-61.3			107.2	17.2	
60.0	10616.	-58.9			89.2	20.5	
50.0	10600.	-57.4			94.4	27.2	

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 FEET MSL
 10 JULY 84
 ASCENSION NO. 97 1211 MDT

SIGNIFICANT LEVEL DATA
 212000Z097
 JALLEN

GEODETIC COORDINATES
 13.16712 LAT DEG
 106.49511 LON DEG

TABLE 14

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		REL. HUM. PERCENT
	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE	
950.2	32.2	11.9	29.0
972.9	29.5	12.0	34.0
950.0	26.6	11.5	39.0
752.4	19.6	8.6	49.0
723.9	13.0	5.9	62.0
700.0	11.3	2.1	53.0
681.2	9.6	-2.0	44.0
623.2	2.9	-1.5	73.0
604.7	-7	-4.5	62.0
578.0	-1.9	-3.5	89.0
554.3	-3.5	-5.3	81.0
543.4	-3.9	-11.4	56.0
534.8	-4.0	-15.6	40.0
518.0	-5.1	-20.7	28.0
500.0	-4.3	-21.8	24.0
400.0	-17.1	-32.0	26.0
364.2	-22.1	-34.9	30.0
300.0	-32.8	-45.3	27.0
267.1	-39.3	-50.5	29.0
253.0	-43.0		
200.0	-54.4		
174.7	-61.3		
150.0	-67.1		
119.6	-70.3		
121.0	-70.5		
122.2	-68.7		
117.6	-68.3		
109.8	-70.7		
100.0	-67.1		
91.0	-66.7		
82.3	-65.9		
71.0	-62.1		
59.0	-59.3		
56.1	-56.3		
50.0	-55.5		
40.0	-54.4		

STATION ALTITUDE 4051.00 FEET MSL
 10 JULY 61
 ASCENSION NO. 97 1211 MDT

UPPER AIR DATA
 2120030097
 JALLEN

GEODETIC COORDINATES
 33.16712 LAT DLG
 106.49511 LON DLG

TABLE 15

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
4051.0	550.2	32.2	29.0	998.2	582.9	220.0	5.1	1.000279
4500.0	556.8	28.7	35.3	994.2	579.0	206.4	5.0	1.000280
5000.0	552.1	26.9	38.5	983.4	576.8	191.6	5.2	1.000277
5500.0	537.4	25.3	40.8	971.5	575.1	178.8	5.7	1.000273
6000.0	522.9	23.9	42.9	959.6	573.4	168.8	6.2	1.000268
6500.0	508.7	22.4	45.0	947.8	571.5	159.9	6.8	1.000264
7000.0	494.7	20.9	47.1	936.2	569.9	149.8	7.4	1.000260
7500.0	480.9	19.4	49.4	924.8	568.2	135.6	7.9	1.000255
8000.0	467.1	17.6	52.5	913.5	566.3	85.9	9.9	1.000252
8500.0	453.5	16.3	55.6	902.3	564.5	25.0	1.2	1.000246
9000.0	440.2	14.7	58.5	891.2	562.5	5.0	2.2	1.000244
9500.0	427.0	13.1	61.7	880.4	560.9	1.2	3.0	1.000239
10000.0	414.0	12.2	64.2	869.8	559.5	2.5	3.6	1.000232
10500.0	401.2	11.4	67.4	859.2	558.4	6.9	3.8	1.000224
11000.0	388.5	10.3	70.7	848.5	556.9	72.6	2.0	1.000216
11500.0	376.0	9.0	74.5	838.0	555.6	133.4	3.6	1.000211
12000.0	363.5	7.6	78.5	828.7	553.3	152.3	6.2	1.000209
12500.0	351.4	6.2	82.6	819.5	552.2	164.0	6.2	1.000207
13000.0	339.7	4.8	86.8	810.7	550.5	168.5	6.5	1.000205
13500.0	327.7	3.4	91.1	802.9	549.0	162.2	7.2	1.000203
14000.0	315.0	2.1	95.4	795.4	547.3	152.8	8.9	1.000198
14500.0	304.5	0.7	99.7	787.0	545.5	145.9	10.7	1.000193
15000.0	293.2	-0.4	104.0	778.4	544.3	140.4	11.6	1.000192
15500.0	282.0	-1.5	108.3	769.1	543.1	138.2	12.2	1.000190
16000.0	271.0	-2.9	112.6	759.4	542.0	139.3	12.5	1.000186
16500.0	260.2	-4.3	116.9	750.6	541.1	149.8	11.9	1.000182
17000.0	249.5	-5.7	121.2	741.8	540.2	151.0	11.0	1.000175
17500.0	239.1	-7.1	125.5	732.4	539.7	174.2	9.6	1.000167
18000.0	228.7	-8.4	129.8	723.4	539.0	197.2	5.1	1.000161
18500.0	218.4	-9.7	134.1	714.1	538.2	231.0	3.8	1.000155
19000.0	208.1	-11.0	138.4	704.8	538.6	264.5	2.5	1.000152
19500.0	197.8	-12.3	142.7	695.5	538.9	298.0	4.7	1.000150
20000.0	187.5	-13.6	147.0	686.3	538.5	331.5	6.9	1.000143
20500.0	177.2	-14.9	151.3	677.0	537.5	365.0	8.0	1.000144
21000.0	166.9	-16.2	155.6	667.8	536.2	398.5	9.1	1.000141
21500.0	156.6	-17.5	160.0	658.5	534.8	432.0	9.7	1.000139
22000.0	146.3	-18.8	164.3	649.2	533.6	465.5	2.5	1.000137
22500.0	136.0	-20.1	168.6	639.9	532.0	499.0	10.3	1.000135
23000.0	125.7	-21.4	172.9	630.6	529.3	532.5	10.9	1.000133
23500.0	115.4	-22.7	177.2	621.3	627.9	566.0	11.4	1.000130

UPPER AIR DATA
2120000097
JALLEN

STATION ALTITUDE 4051.00 FEET MSL
30 JULY 84 1211 MDT
ASCENSION NO. 37

GEODETIC COORDINATES
33.76712 LAT DEG
106.69511 LON DEG

TABLE 15 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GRAMS PER CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
24000.0	417.7	-14.6	25.6	562.5	626.5	46.7	10.4	1.000126
24500.0	409.5	-15.8	25.5	554.0	625.2	49.9	9.1	1.000126
25000.0	401.5	-16.9	26.0	545.5	623.9	54.0	7.4	1.000126
25500.0	393.4	-18.0	26.7	536.9	622.4	60.7	6.4	1.000122
26000.0	385.4	-19.1	27.6	528.3	621.1	65.1	6.4	1.000120
26500.0	377.5	-20.2	28.5	519.9	619.7	67.4	6.8	1.000116
27000.0	370.0	-21.3	29.3	511.5	618.4	68.5	7.2	1.000116
27500.0	362.4	-22.4	29.9	503.3	617.0	67.6	7.4	1.000114
28000.0	354.9	-23.5	29.6	495.1	615.6	67.3	7.5	1.000112
28500.0	347.5	-24.7	29.3	487.1	614.1	67.9	7.6	1.000110
29000.0	340.2	-25.9	28.9	479.1	612.7	65.6	7.1	1.000106
29500.0	333.1	-27.0	28.6	471.4	611.2	58.7	6.3	1.000106
30000.0	326.1	-28.2	28.3	463.7	609.8	44.3	4.7	1.000104
30500.0	319.3	-29.4	26.0	456.2	608.3	11.4	3.4	1.000102
31000.0	312.7	-30.5	27.6	448.9	606.9	2.0	2.8	1.000101
31500.0	306.1	-31.7	27.3	441.6	605.4	.8	2.1	1.000099
32000.0	299.7	-32.9	27.0	434.5	603.9	57.1	2.5	1.000097
32500.0	293.2	-34.1	27.4	427.3	602.4	80.5	4.7	1.000096
33000.0	286.9	-35.3	27.9	420.2	600.9	84.4	5.0	1.000094
33500.0	280.7	-36.5	28.2	413.3	599.3	93.9	5.8	1.000093
34000.0	274.5	-37.6	29.5	406.4	597.7	97.4	6.8	1.000091
34500.0	268.7	-39.0	28.9	399.7	596.1	103.9	7.5	1.000089
35000.0	262.3	-40.2	21.6**	393.0	594.5	112.3	8.2	1.000086
35500.0	257.0	-41.5	11.9**	386.4	593.0	118.8	8.8	1.000085
36000.0	251.5	-42.7	2.3**	379.9	591.4	113.7	9.1	1.000083
36500.0	245.6	-43.9		373.2	589.9	116.4	9.1	1.000083
37000.0	240.0	-45.1		366.4	588.3	111.7	10.1	1.000082
37500.0	234.5	-46.3		360.1	586.8	110.4	10.3	1.000080
38000.0	229.2	-47.4		353.7	585.3	111.6	10.7	1.000078
38500.0	223.9	-48.5		347.5	583.8	112.1	10.4	1.000077
39000.0	219.4	-49.8		341.3	582.2	112.1	10.5	1.000076
39500.0	213.5	-51.0		335.3	580.7	110.4	12.0	1.000075
40000.0	209.0	-52.1		329.4	579.1	104.6	13.4	1.000071
40500.0	204.6	-53.2		323.6	577.5	109.4	14.4	1.000072
41000.0	199.5	-54.5		317.9	576.0	111.4	12.6	1.000071
41500.0	194.5	-55.6		312.1	574.4	111.2	19.1	1.000071
42000.0	190.1	-57.0		306.4	572.8	109.5	20.4	1.000071
42500.0	185.6	-58.2		300.8	571.2	105.9	21.1	1.000071
43000.0	181.2	-59.4		295.4	569.5	100.6	21.2	1.000066
43500.0	176.5	-60.7		290.0	567.9	96.9	21.1	1.000065

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

UPPER AIR DATA

STATION ALTITUDE 40500 FEET MSL
30 JULY 64
ASCENSION NO. 27 1211 MDT

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

212000Z97
JALLEN
TABLE 15 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
44000.0	172.6	-61.5		264.5	566.4	95.4	20.5	1.000063
44500.0	168.4	-62.7		278.8	565.2	93.8	19.5	1.000062
45000.0	164.3	-63.6		273.2	563.9	92.1	19.9	1.000061
45500.0	160.7	-64.6		267.7	562.5	88.7	17.7	1.000060
46000.0	156.5	-65.5		262.3	561.4	63.3	16.4	1.000056
46500.0	152.5	-66.5		257.1	560.1	78.4	15.2	1.000057
47000.0	148.5	-67.5		252.0	558.7	74.1	14.0	1.000050
47500.0	145.0	-68.6		247.0	557.2	69.0	11.9	1.000055
48000.0	141.4	-69.7		242.2	555.6	64.8	9.3	1.000054
48500.0	137.9	-70.3		236.8	554.8	42.4	6.8	1.000053
49000.0	134.4	-70.4		230.9	554.7	3.2	6.7	1.000051
49500.0	131.0	-70.5		225.2	554.5	351.8	9.9	1.000050
50000.0	127.7	-69.9		217.9	556.7	353.0	13.7	1.000049
50500.0	124.5	-69.6		212.1	557.2	3.0	16.3	1.000047
51000.0	121.4	-69.5		206.6	557.4	22.9	18.7	1.000046
51500.0	118.4	-69.1		201.3	557.5	39.5	20.2	1.000043
52000.0	115.4	-68.0		196.9	556.7	56.7	21.7	1.000042
52500.0	112.5	-69.3		192.8	555.5	68.4	21.3	1.000043
53000.0	109.7	-70.2		188.7	554.4	78.7	18.3	1.000042
53500.0	106.9	-69.7		183.1	555.7	88.4	15.1	1.000041
54000.0	104.3	-68.7		177.7	557.0	97.1	11.5	1.000040
54500.0	101.7	-67.7		172.4	558.4	99.9	9.6	1.000038
55000.0	99.1	-67.1		167.6	559.3	92.2	9.4	1.000037
55500.0	96.7	-66.0		163.1	559.4	81.7	9.5	1.000036
56000.0	94.3	-65.3		159.2	559.6	70.0	10.1	1.000035
56500.0	91.9	-64.7		155.2	559.7	62.2	10.6	1.000033
57000.0	89.7	-64.5		151.2	560.0	56.9	11.8	1.000034
57500.0	87.6	-64.4		147.7	560.2	54.6	13.0	1.000033
58000.0	85.3	-63.7		143.6	560.5	54.2	14.5	1.000031
58500.0	83.3	-63.0		139.9	560.7	61.7	17.0	1.000031
59000.0	81.1	-61.6		136.2	561.3	71.4	20.7	1.000030
59500.0	79.1	-60.0		132.5	562.1	51.5	23.9	1.000031
60000.0	77.2	-58.9		128.9	562.9	92.0	27.2	1.000029
60500.0	75.1	-58.1		125.4	563.6	98.4	20.2	1.000028
61000.0	73.5	-56.2		122.0	564.4	103.6	26.5	1.000027
61500.0	71.7	-55.7		119.7	565.2	105.5	27.7	1.000026
62000.0	70.3	-54.3		115.5	566.0	102.5	19.7	1.000026
62500.0	68.3	-51.7		112.5	566.6	93.3	16.6	1.000025
63000.0	66.4	-49.3		109.5	567.1	93.1	14.9	1.000024
63500.0	64.5	-47.1		104.7	567.7	90.7	14.5	1.000024

UPPER AIR DATA
210000Z097
JALLEN

STATION ALTITUDE 4051.00 FEET MSL
10 JULY 84
ASCENSION NO. 97 1211 MDT

GEOMETRIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 15 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
6400.0	53.5	-50.3		103.9	568.3	91.9	15.6	1.000023
6450.0	52.0	-50.5		101.2	568.9	91.9	17.1	1.000023
6500.0	50.5	-50.5		98.6	569.5	90.2	19.0	1.000022
6550.0	49.0	-50.6		95.8	570.5	88.6	20.8	1.000021
6600.0	47.5	-50.5		93.1	572.1	87.1	22.5	1.000021
6650.0	46.0	-50.4		90.4	573.5	86.2	23.7	1.000020
6700.0	44.5	-50.2		86.2	573.9	86.4	24.1	1.000020
6750.0	43.0	-50.0		86.0	574.1	86.4	24.5	1.000019
6800.0	42.4	-50.6		84.0	574.3	85.5	25.1	1.000019
6850.0	41.9	-50.7		81.9	574.5	84.7	25.8	1.000018
6900.0	40.9	-50.5		79.9	574.8	85.1	27.1	1.000018
6950.0	40.0	-50.4		78.0	574.9	85.4	28.3	1.000017
7000.0	39.5	-50.3		76.2	575.1	88.4	28.7	1.000017
7050.0	38.5	-50.1		74.3	575.2	91.5	29.2	1.000017
7100.0	38.4	-50.0		72.6	575.4	95.5	28.5	1.000016
7150.0	38.4	-50.9		70.8	575.5	100.1	27.4	1.000016
7200.0	38.3	-50.6		69.1	575.7			1.000015
7250.0	38.3	-50.7		67.5	575.8			1.000015
7300.0	38.3	-50.6		65.9	576.0			1.000015
7350.0	38.4	-50.4		64.3	576.2			1.000014

STATION ALTITUDE 4051.00 FEET
20 JULY 54
ASCENSION NO. 27 1211 MDT

WAGGERS LEVELS
ALC000097
JALCEN
TABLE 16

GEODETTIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.	WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEW POINT CENTIGRADE	PERCENT	DIRECTION DEGREES(TN)	SPEED KNOTS
810.0	5037.	26.6	11.5	39.	189.7	5.2
800.0	5039.	21.5	9.5	46.	151.3	4.0
750.0	5129.	15.9	7.2	56.	17.2	1.5
700.0	5236.	11.3	2.1	53.	9.0	3.5
650.0	5351.	6.1	-1.7	59.	165.4	6.2
600.0	5482.	7.	-4.3	72.	143.7	11.1
550.0	5635.	-7.7	-9.1	71.	150.4	11.0
500.0	5800.	-4.3	-21.8	24.	352.7	3.5
450.0	5914.	-10.3	-25.6	25.	36.9	9.7
400.0	6052.	-17.1	-32.0	26.	55.6	7.1
350.0	6223.	-24.3	-37.0	29.	57.7	7.5
300.0	6417.	-32.8	-45.3	27.	54.2	2.4
250.0	6632.	-47.0			119.1	9.1
200.0	6852.	-54.4			111.0	17.1
175.0	7015.	-51.2			96.3	23.5
150.0	7171.	-67.1			75.7	14.6
125.0	7320.	-66.6			359.2	16.0
100.0	7469.	-67.1			95.3	9.5
50.0	59091.	-55.2			75.5	22.7
70.0	61779.	-62.1			102.8	20.3
50.0	64226.	-59.3			89.5	19.5
50.0	65720.	-55.5			85.0	26.9

.. AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

SIGNIFICANT LEVEL DATA
210000009
JULY

STATION ALTITUDE 4351.0J FEET MSL
20 JULY 94
ASCENSION NO. 94 1444 MDT

TABLE 17

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		REL. HUM. PERCENT
	AIR DEGREES CENTIGRADE	DEWPOINT DEGREES CENTIGRADE	
979.4	33.2	11.1	26.0
875.7	31.1	10.4	26.0
950.0	28.9	10.6	32.0
900.0	23.5	9.0	37.0
760.0	21.3	5.8	39.0
700.0	12.6	3.6	54.0
636.1	5.4	-1.1	63.0
581.9	-7	-2.4	88.0
563.9	-1.4	-4.4	80.0
547.3	-3.1	-12.3	49.0
513.7	-5.5	-21.5	27.0
500.0	-5.7	-21.7	27.0
449.7	-10.0	-25.9	27.0
433.7	-12.0	-27.1	27.0
400.0	-17.2	-31.7	27.0
300.0	-33.0	-45.2	26.0
268.3	-39.0	-49.6	31.0
250.0	-42.8		
242.2	-43.9		
200.0	-54.9		
171.2	-62.6		
150.0	-67.6		
136.7	-68.7		
128.9	-67.8		
117.7	-71.6		
110.5	-70.9		
100.0	-67.6		
78.9	-65.2		
75.0	-61.7		
50.0	-57.2		
42.7	-55.5		
38.1	-56.7		

STATION ALTITUDE 4051.00 FEET MSL
30 JULY 64 1444 MDT
ASCENSION NO. 35

UPPER AIR DATA
2100000000
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 18

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE WET-BULB DEGREES	REL-HUM. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
							DIRECTION DEGREES(TN)	SPEED KNOTS	
4051.0	828.6	33.2	11.1	25.3	997.2	663.5	210.0	9.9	1.000275
4500.0	695.1	30.2	10.5	29.6	987.9	660.6	202.0	8.2	1.000273
5000.0	650.4	26.9	10.5	31.9	975.2	679.0	191.0	6.6	1.000270
5500.0	635.9	27.4	9.9	33.4	963.5	677.2	173.1	5.4	1.000266
6000.0	621.5	25.9	9.2	34.8	952.0	675.5	152.4	5.1	1.000261
6500.0	597.5	24.3	8.4	35.2	940.7	673.7	140.2	5.4	1.000257
7000.0	572.9	22.9	7.6	37.6	929.5	671.9	129.0	7.0	1.000252
7500.0	549.9	21.2	6.9	39.0	918.3	670.1	127.5	7.7	1.000246
8000.0	525.1	19.8	6.4	41.5	906.5	668.4	120.5	5.0	1.000244
8500.0	500.5	18.0	5.9	44.0	894.9	666.3	124.3	4.5	1.000241
9000.0	475.0	17.0	5.4	46.4	883.5	665.1	126.5	5.1	1.000237
9500.0	449.2	15.5	4.9	48.9	872.3	663.4	115.7	4.5	1.000234
10000.0	423.3	14.1	4.2	51.4	861.2	661.7	105.7	4.0	1.000230
10500.0	397.7	12.7	3.6	53.9	850.4	660.1	97.0	3.6	1.000226
11000.0	372.0	11.3	2.9	55.6	839.1	658.4	98.5	3.3	1.000224
11500.0	346.1	9.9	1.9	57.4	828.0	656.7	109.1	3.0	1.000218
12000.0	320.2	8.5	1.0	59.1	817.1	655.1	120.4	3.1	1.000213
12500.0	294.2	7.4	.1	60.9	806.4	653.4	144.3	7.3	1.000209
13000.0	268.7	5.5	-1.6	62.5	795.8	651.3	166.6	4.1	1.000205
13500.0	242.5	4.3	-1.1	65.0	784.7	650.2	179.0	4.5	1.000202
14000.0	216.8	3.2	-1.3	72.1	773.7	648.7	183.6	5.5	1.000200
14500.0	190.9	1.9	-1.6	77.4	762.9	647.2	176.7	5.4	1.000197
15000.0	165.1	.8	-2.0	82.5	752.2	645.7	161.2	5.4	1.000194
15500.0	139.1	-1.7	-2.4	87.9	741.7	644.1	141.0	5.0	1.000191
16000.0	113.1	-1.1	-3.1	93.2	729.1	643.5	130.3	6.4	1.000186
16500.0	87.3	-1.5	-3.9	73.1	717.3	642.3	121.4	6.0	1.000180
17000.0	61.7	-2.6	-10.9	53.3	707.2	641.1	122.3	5.6	1.000171
17500.0	36.0	-3.7	-14.2	43.6	696.1	640.0	124.0	4.2	1.000166
18000.0	10.9	-5.4	-16.9	37.1	684.8	639.0	104.6	7.3	1.000151
18500.0	-14.5	-6.1	-19.8	30.4	673.7	638.1	75.4	2.0	1.000157
19000.0	-39.9	-7.3	-21.6	27.0	662.0	637.2	56.7	5.2	1.000153
19500.0	-65.1	-8.3	-21.7	27.0	649.8	637.3	51.0	7.7	1.000150
20000.0	-90.4	-9.3	-22.5	27.0	637.4	636.2	46.8	8.6	1.000146
20500.0	-115.7	-10.3	-23.3	27.0	625.1	635.1	47.7	9.6	1.000145
21000.0	-140.9	-11.3	-24.1	27.0	613.0	634.0	41.0	9.3	1.000142
21500.0	-166.1	-12.3	-24.8	27.0	600.1	632.9	41.3	8.9	1.000140
22000.0	-191.3	-13.3	-25.6	27.0	589.4	631.8	45.0	5.8	1.000136
22500.0	-216.5	-14.3	-26.3	27.0	589.5	630.8	52.5	9.0	1.000135
23000.0	-241.7	-15.3	-27.0	27.0	579.7	629.5	54.0	8.9	1.000133
23500.0	-266.9	-16.3	-27.0	27.0	570.9	629.4	51.9	8.6	1.000131

STATION ALTITUDE 4051.00 FEET MSL
 70 JULY 52
 ASCENSION NO. 98

UPPER AIR DATA
 CIRCUMPORE
 JALLEN

TABLE 18 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND METER KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
24500.0	419.0	-14.9	27.0	502.4	620.8	49.1	9.7	1.000126
24500.0	409.1	-15.7	27.0	554.0	625.3	42.4	7.5	1.000126
24500.0	401.5	-17.0	27.0	545.7	623.7	39.1	6.7	1.000124
24500.0	393.3	-18.1	27.1	537.0	622.2	41.5	5.7	1.000127
24500.0	385.1	-19.3	27.1	528.3	620.8	44.4	4.8	1.000120
24500.0	377.2	-20.4	27.0	519.7	619.4	47.0	4.3	1.000118
24500.0	369.4	-21.6	27.3	511.3	618.0	50.0	3.3	1.000116
24500.0	361.7	-22.7	27.3	503.1	616.5	50.4	2.7	1.000114
24500.0	354.2	-23.4	27.4	496.9	615.2	36.4	1.9	1.000112
24500.0	346.9	-25.0	27.5	488.9	613.7	34.9	1.4	1.000110
24500.0	339.2	-26.2	27.6	479.1	612.3	328.4	2.9	1.000106
24500.0	332.1	-27.3	27.6	471.4	610.9	343.4	6.3	1.000109
24500.0	325.4	-28.5	27.7	463.8	609.5	352.7	5.3	1.000104
24500.0	318.4	-29.6	27.8	456.4	608.0	6.4	6.1	1.000103
24500.0	312.1	-30.6	27.9	449.0	606.5	16.7	4.8	1.000101
24500.0	306.0	-31.6	27.9	441.9	605.1	20.7	4.0	1.000094
24500.0	299.1	-33.1	28.0	434.8	603.7	24.9	3.1	1.000088
24500.0	293.1	-34.4	28.0	427.5	602.2	24.9	2.1	1.000083
24500.0	286.9	-35.4	29.3	420.1	600.7	27.7	1.1	1.000078
24500.0	281.1	-36.4	29.3	413.2	599.2	54.7	1.1	1.000073
24500.0	274.7	-37.4	30.0	406.1	597.7	57.4	1.1	1.000069
24500.0	268.2	-38.5	31.0	399.5	596.2	91.4	3.3	1.000064
24500.0	261.7	-39.7	27.6**	392.4	594.7	91.7	3.3	1.000060
24500.0	254.9	-41.2	12.0**	386.1	593.2	84.1	1.1	1.000054
24500.0	248.1	-42.4	2.7**	379.5	591.5	72.1	1.1	1.000049
24500.0	241.2	-43.4		372.8	590.3	74.3	1.1	1.000043
24500.0	234.2	-44.9		365.7	589.2	71.7	1.1	1.000037
24500.0	227.1	-46.3		358.4	587.5	70.6	1.1	1.000031
24500.0	220.1	-47.3		352.1	585.8	77.4	1.1	1.000025
24500.0	213.1	-48.4		347.2	584.1	71.1	1.1	1.000019
24500.0	206.1	-49.4		341.3	582.3	71.1	1.1	1.000013
24500.0	199.1	-51.1		335.3	580.3	67.4	1.1	1.000007
24500.0	192.0	-51.2		329.8	578.9	57.4	1.1	1.000001
24500.0	184.9	-53.2		324.2	577.1	57.4	1.1	1.000000
24500.0	177.9	-55.1		318.6	575.4	57.4	1.1	1.000000
24500.0	170.9	-57.4		312.7	573.8	57.4	1.1	1.000000
24500.0	163.9	-59.4		307.0	572.2	74.3	1.1	1.000000
24500.0	156.9	-61.4		301.7	570.5	78.7	1.1	1.000000
24500.0	149.9	-63.4		295.9	569.0	78.7	1.1	1.000000
24500.0	142.9	-65.4		290.1	567.4	78.7	1.1	1.000000

** AT BASE NO. 4051.00 FEET MSL WAS USED IN INTERPOLATION.

STATION ALTITUDE 4051.00 FEET MSL
30 JULY 54
ASCENSION NO. 98

1444 MDT

UPPER AIR DATA
2120030098
JALLEN

TABLE 18 Cont'd

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREE CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
4400.0	172.6	-62.2		285.0	565.9	79.3	16.8	1.000063
4450.0	158.4	-63.2		279.4	564.5	77.0	15.8	1.000062
4500.0	154.2	-64.2		273.8	563.2	74.8	15.9	1.000061
4550.0	150.2	-65.1		268.3	561.9	72.0	12.0	1.000060
4600.0	156.3	-66.1		262.9	560.6	69.1	9.5	1.000059
4650.0	152.4	-67.0		257.6	559.4	62.6	6.9	1.000057
4700.0	148.7	-67.7		252.1	558.4	26.6	4.5	1.000056
4750.0	145.0	-68.0		246.2	558.0	336.6	5.3	1.000055
4800.0	141.3	-68.3		240.4	557.5	333.2	8.0	1.000054
4850.0	137.8	-68.6		234.7	557.2	331.8	10.6	1.000052
4900.0	134.4	-68.4		228.7	557.4	348.3	12.3	1.000051
4950.0	131.0	-68.1		222.6	557.9	4.9	14.9	1.000050
5000.0	127.8	-68.2		217.1	557.8	19.0	17.7	1.000048
5050.0	124.5	-69.2		212.8	556.3	31.3	23.9	1.000047
5100.0	121.4	-70.3		208.5	554.9	40.1	22.6	1.000046
5150.0	118.4	-71.4		204.3	553.4	49.5	19.8	1.000046
5200.0	115.4	-71.4		199.2	553.4	61.3	17.6	1.000044
5250.0	112.5	-71.1		193.9	553.8	71.7	14.4	1.000043
5300.0	109.6	-70.6		188.6	554.4	87.3	11.9	1.000042
5350.0	106.9	-69.8		183.1	555.5	88.1	11.6	1.000041
5400.0	104.2	-69.0		177.8	556.7	86.7	11.4	1.000040
5450.0	101.6	-68.1		172.6	557.5	82.4	11.5	1.000038
5500.0	99.1	-67.5		167.8	558.7	78.2	11.8	1.000037
5550.0	96.6	-67.3		163.4	559.0	71.7	12.5	1.000036
5600.0	94.2	-67.0		159.2	559.4	66.1	13.4	1.000035
5650.0	91.9	-66.7		155.1	559.7	61.7	14.1	1.000035
5700.0	89.4	-66.5		151.1	560.0	57.8	14.8	1.000034
5750.0	87.4	-66.6		147.2	560.4	56.1	16.1	1.000033
5800.0	85.2	-66.0		143.3	560.7	54.7	17.4	1.000032
5850.0	83.1	-65.7		139.6	561.1	52.5	18.2	1.000031
5900.0	81.1	-65.5		136.0	561.4	71.5	19.3	1.000030
5950.0	79.1	-65.2		132.5	561.8	82.1	18.8	1.000030
6000.0	77.2	-64.5		128.8	562.7	94.5	18.2	1.000029
6050.0	75.3	-63.8		125.3	563.5	102.0	17.0	1.000028
6100.0	73.4	-63.1		121.8	564.5	104.9	14.3	1.000027
6150.0	71.7	-62.6		118.4	565.6	106.2	12.0	1.000026
6200.0	69.9	-61.7		115.2	566.5	97.7	11.3	1.000026
6250.0	68.2	-61.4		112.2	567.0	88.4	10.9	1.000025
6300.0	66.6	-61.0		109.4	567.4	91.6	12.1	1.000024
6350.0	65.0	-60.7		106.6	567.8	94.8	11.5	1.000024

UPPER AIR DATA 110000Z JALAN

STATION ALTITUDE 4051.00 FEET MSL
10 JULY 64 1444 WP
ASCENSION NO. 95

GEODETTIC COORDINATES
N 1.12712 LAT DEG
100.44511 LON DEG

TABLE 18 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TA)	SPEED KNOTS	INDEX OF REFRACTION
6400.0	57.2	-55.4	103.5	94.4	568.3	94.4	15.9	1.000023
6500.0	57.0	-55.0	101.3	93.1	568.7	93.1	19.0	1.000023
6600.0	56.6	-54.7	96.7	92.7	569.1	92.7	21.9	1.000022
6800.0	56.0	-54.4	92.2	92.8	569.5	92.8	24.3	1.000021
7000.0	55.4	-54.1	93.9	93.9	570.0	93.9	26.8	1.000021
7200.0	54.7	-53.8	91.4	94.4	570.6	94.8	27.2	1.000020
7400.0	54.0	-53.4	89.1	96.1	570.8	96.6	27.2	1.000020
7600.0	53.4	-53.1	86.9	97.1	571.3	96.2	27.0	1.000019
7800.0	52.8	-52.8	84.5	97.7	571.7	93.0	26.4	1.000019
8000.0	52.1	-52.5	82.5	97.2	572.1	89.6	25.9	1.000018
8200.0	51.4	-52.2	80.4	97.5	572.5	87.0	25.9	1.000018
8400.0	50.7	-51.9	78.4	97.8	572.9	84.3	25.9	1.000017
8600.0	50.0	-51.7	76.5	97.5	573.2	81.0	25.7	1.000017
8800.0	49.3	-51.4	74.5	97.3	573.5	80.5	25.4	1.000017
9000.0	48.6	-51.1	72.7	97.3	573.8	80.0	25.1	1.000016
9200.0	47.9	-50.9	70.9	97.4	574.2	80.0	25.1	1.000016
9400.0	47.2	-50.6	69.2	97.6	574.6	80.0	26.4	1.000016
9600.0	46.5	-50.3	67.5	97.5	574.9	80.0	26.4	1.000016
9800.0	45.8	-50.0	65.8	97.0	575.2	80.0	26.4	1.000016
10000.0	45.1	-49.7	64.1	96.0	575.5	80.0	26.4	1.000016
10200.0	44.4	-49.4	62.4	94.4	575.8	80.0	26.4	1.000016
10400.0	43.7	-49.1	60.7	93.1	576.1	80.0	26.4	1.000016
10600.0	43.0	-48.8	59.0	91.4	576.4	80.0	26.4	1.000016
10800.0	42.3	-48.5	57.3	89.1	576.7	80.0	26.4	1.000016
11000.0	41.6	-48.2	55.6	86.9	577.0	80.0	26.4	1.000016
11200.0	40.9	-47.9	53.9	84.5	577.3	80.0	26.4	1.000016
11400.0	40.2	-47.6	52.2	82.5	577.6	80.0	26.4	1.000016
11600.0	39.5	-47.3	50.5	80.4	577.9	80.0	26.4	1.000016
11800.0	38.8	-47.0	48.8	78.4	578.2	80.0	26.4	1.000016
12000.0	38.1	-46.7	47.1	76.5	578.5	80.0	26.4	1.000016
12200.0	37.4	-46.4	45.4	74.5	578.8	80.0	26.4	1.000016
12400.0	36.7	-46.1	43.7	72.7	579.1	80.0	26.4	1.000016
12600.0	36.0	-45.8	42.0	70.9	579.4	80.0	26.4	1.000016
12800.0	35.3	-45.5	40.3	69.2	579.7	80.0	26.4	1.000016
13000.0	34.6	-45.2	38.6	67.5	580.0	80.0	26.4	1.000016
13200.0	33.9	-44.9	36.9	65.8	580.3	80.0	26.4	1.000016
13400.0	33.2	-44.6	35.2	64.1	580.6	80.0	26.4	1.000016
13600.0	32.5	-44.3	33.5	62.4	580.9	80.0	26.4	1.000016
13800.0	31.8	-44.0	31.8	60.7	581.2	80.0	26.4	1.000016
14000.0	31.1	-43.7	30.1	59.0	581.5	80.0	26.4	1.000016
14200.0	30.4	-43.4	28.4	57.3	581.8	80.0	26.4	1.000016
14400.0	29.7	-43.1	26.7	55.6	582.1	80.0	26.4	1.000016
14600.0	29.0	-42.8	25.0	53.9	582.4	80.0	26.4	1.000016
14800.0	28.3	-42.5	23.3	52.2	582.7	80.0	26.4	1.000016
15000.0	27.6	-42.2	21.6	50.5	583.0	80.0	26.4	1.000016
15200.0	26.9	-41.9	19.9	48.8	583.3	80.0	26.4	1.000016
15400.0	26.2	-41.6	18.2	47.1	583.6	80.0	26.4	1.000016
15600.0	25.5	-41.3	16.5	45.4	583.9	80.0	26.4	1.000016
15800.0	24.8	-41.0	14.8	43.7	584.2	80.0	26.4	1.000016
16000.0	24.1	-40.7	13.1	42.0	584.5	80.0	26.4	1.000016
16200.0	23.4	-40.4	11.4	40.3	584.8	80.0	26.4	1.000016
16400.0	22.7	-40.1	9.7	38.6	585.1	80.0	26.4	1.000016
16600.0	22.0	-39.8	8.0	36.9	585.4	80.0	26.4	1.000016
16800.0	21.3	-39.5	6.3	35.2	585.7	80.0	26.4	1.000016
17000.0	20.6	-39.2	4.6	33.5	586.0	80.0	26.4	1.000016
17200.0	19.9	-38.9	2.9	31.8	586.3	80.0	26.4	1.000016
17400.0	19.2	-38.6	1.2	30.1	586.6	80.0	26.4	1.000016
17600.0	18.5	-38.3	-0.5	28.4	586.9	80.0	26.4	1.000016
17800.0	17.8	-38.0	-2.2	26.7	587.2	80.0	26.4	1.000016
18000.0	17.1	-37.7	-3.9	25.0	587.5	80.0	26.4	1.000016
18200.0	16.4	-37.4	-5.6	23.3	587.8	80.0	26.4	1.000016
18400.0	15.7	-37.1	-7.3	21.6	588.1	80.0	26.4	1.000016
18600.0	15.0	-36.8	-9.0	19.9	588.4	80.0	26.4	1.000016
18800.0	14.3	-36.5	-10.7	18.2	588.7	80.0	26.4	1.000016
19000.0	13.6	-36.2	-12.4	16.5	589.0	80.0	26.4	1.000016
19200.0	12.9	-35.9	-14.1	14.8	589.3	80.0	26.4	1.000016
19400.0	12.2	-35.6	-15.8	13.1	589.6	80.0	26.4	1.000016
19600.0	11.5	-35.3	-17.5	11.4	589.9	80.0	26.4	1.000016
19800.0	10.8	-35.0	-19.2	9.7	590.2	80.0	26.4	1.000016
20000.0	10.1	-34.7	-20.9	8.0	590.5	80.0	26.4	1.000016
20200.0	9.4	-34.4	-22.6	6.3	590.8	80.0	26.4	1.000016
20400.0	8.7	-34.1	-24.3	4.6	591.1	80.0	26.4	1.000016
20600.0	8.0	-33.8	-26.0	2.9	591.4	80.0	26.4	1.000016
20800.0	7.3	-33.5	-27.7	1.2	591.7	80.0	26.4	1.000016
21000.0	6.6	-33.2	-29.4	-0.5	592.0	80.0	26.4	1.000016
21200.0	5.9	-32.9	-31.1	-2.2	592.3	80.0	26.4	1.000016
21400.0	5.2	-32.6	-32.8	-3.9	592.6	80.0	26.4	1.000016
21600.0	4.5	-32.3	-34.5	-5.6	592.9	80.0	26.4	1.000016
21800.0	3.8	-32.0	-36.2	-7.3	593.2	80.0	26.4	1.000016
22000.0	3.1	-31.7	-37.9	-9.0	593.5	80.0	26.4	1.000016
22200.0	2.4	-31.4	-39.6	-10.7	593.8	80.0	26.4	1.000016
22400.0	1.7	-31.1	-41.3	-12.4	594.1	80.0	26.4	1.000016
22600.0	1.0	-30.8	-43.0	-14.1	594.4	80.0	26.4	1.000016
22800.0	0.3	-30.5	-44.7	-15.8	594.7	80.0	26.4	1.000016
23000.0	-0.4	-30.2	-46.4	-17.5	595.0	80.0	26.4	1.000016
23200.0	-1.1	-29.9	-48.1	-19.2	595.3	80.0	26.4	1.000016
23400.0	-1.8	-29.6	-49.8	-20.9	595.6	80.0	26.4	1.000016
23600.0	-2.5	-29.3	-51.5	-22.6	595.9	80.0	26.4	1.000016
23800.0	-3.2	-29.0	-53.2	-24.3	596.2	80.0	26.4	1.000016
24000.0	-3.9	-28.7	-54.9	-26.0	596.5	80.0	26.4	1.000016
24200.0	-4.6	-28.4	-56.6	-27.7	596.8	80.0	26.4	1.000016
24400.0	-5.3	-28.1	-58.3	-29.4	597.1	80.0	26.4	1.000016
24600.0	-6.0	-27.8	-60.0	-31.1	597.4	80.0	26.4	1.000016
24800.0	-6.7	-27.5	-61.7	-32.8	597.7	80.0	26.4	1.000016
25000.0	-7.4	-27.2	-63.4	-34.5	598.0	80.0	26.4	1.000016
25200.0	-8.1	-26.9	-65.1	-36.2	598.3	80.0	26.4	1.000016
25400.0	-8.8	-26.6	-66.8	-37.9	598.6	80.0	26.4	1.000016
25600.0	-9.5	-26.3	-68.5	-39.6	598.9	80.0	26.4	1.000016
25800.0	-10.2	-26.0	-70.2	-41.3	599.2	80.0	26.4	1.000016
26000.0	-10.9	-25.7	-71.9	-43.0	599.5	80.0	26.4	1.000016
26200.0	-11.6	-25.4	-73.6	-44.7	599.8	80.0	26.4	1.000016
26400.0	-12.3	-25.1	-75.3	-46.4	600.1	80.0	26.4	1.000016
26600.0	-13.0	-24.8	-77.0	-48.1	600.4	80.0	26.4	1.000016
26800.0	-13.7	-24.5	-78.7	-49.8	600.7	80.0	26.4	1.000016
27000.0	-14.4	-24.2	-80.4	-51.5	601.0	80.0	26.4	1.000016
27200.0	-15.1	-23.9	-82.1	-53.2	601.3	80.0	26.4	1.000016
27400.0	-15.8	-23.6	-83.8	-54.9	601.6	80.0	26.4	1.000016
27600.0	-16.5	-23.3	-85.5	-56.6	601.9	80.0	26.4	1.000016
27800.0	-17.2	-23.0	-87.2	-58.3	602.2	80.0	26.4	1.000016
28000.0	-17.9	-22.7	-88.9	-60.0	602.5	80.0	26.4	1.000016
28200.0	-18.6	-22.4	-90.6	-61.7	602.8	80.0	26.4	1.000016
28400.0	-19.3	-22.1	-92.3	-63.4	603.1	80.0	26.4	1.000016
28600.0	-20.0	-21.8	-94.0	-65.1	603.4	80.0	26.4	1.000016
28800.0	-20.7	-21.5	-95.7	-66.8	603.7	80.0	26.4	1.000016
29000.0	-21.4	-21.2	-97.4	-68.5	604.0	80.0	26.4	1.000016
29200.0	-22.1	-20.9	-99.1	-70.2	604.3	80.0	26.4	1.000016
29400.0	-22.8	-20.6	-100.8	-71.9	604.6	80.0	26.4	1.000016
29600.0	-23.5	-20.3	-102.5	-73.6	604.9	80.0	26.4	1.000016
29800.0	-24.2	-20.0	-104.2	-75.3	605.2	80.0	26.4	1.000016
30000.0	-24.9	-19.7	-105.9	-77.0	605.5	80.0	26.4	1.000016
30200.0	-25.6	-19.4	-107.6	-78.7	605.8	80.0	26.4	1.000016
30400.0	-26.3	-19.1	-109.3	-80.4	606.1	80.0	26.4	1.000016
30600.0	-27.0	-18.8	-111.0	-82.1	606.4	80.0	26.4	1.000016
30800.0	-27.7	-18.5	-112.7	-83.8	6			

STATION ALTITUDE 4000 FT. 1000 M.
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 ASCENSION IS.

MANOIRIUM LEVELS
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TABLE 19

PRESSURE (GEOMETRIC)	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	WIND DATA	
			DIRECTION DEGREES (TN)	SPEED KNOTS
4000	28.9	32.	190.4	6.6
3500	23.5	37.	133.7	0.1
3000	19.1	44.	126.0	4.5
2500	12.6	54.	97.0	3.0
2000	7.0	61.	146.0	3.3
1500	1.4	79.	176.0	5.4
1000	-2.8	54.	122.8	5.5
500	-5.7	27.	52.4	7.4
0	-10.5	27.	47.7	8.8
4000	-17.2	27.	39.5	6.6
3500	-24.5	27.	2.1	1.7
3000	-33.0	28.	24.5	5.4
2500	-40.8		77.1	6.7
2000	-54.0		80.1	15.5
1500	-61.5		28.9	17.2
1000	-67.6		6.7	5.4
500	-59.1		29.4	25.2
0	-57.6		50.1	11.7
4000	-65.3		76.0	13.4
3500	-61.7		98.7	11.4
3000	-59.6		92.5	20.4
2500	-57.2		97.5	25.4
2000	-54.2			

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

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